OLD!

THE ESSENTIAL GUIDE TO CLASSIC GAMES

REVIEWED

retro GAMER

AMSTRAD | COMMODORE | SEGA | NINTENDO | ATARI | SINCLAIR | NEO GEO | SONY | COIN-OP | MOBILE

HANDS-ON WITH THE EVERCADE
HAS BLAZE CREATED THE ULTIMATE COLLECTIBLE HANDHELD CONSOLE?

ETERNAL DARKNESS: SANITY'S REQUIEM
DENIS DYACK REVISITS HIS MACABRE LOVECRAFT-INSPIRED ADVENTURE

THE LEGACY OF MYST
HOW CYAN'S ADVENTURE INSPIRED COUNTLESS GAME DEVELOPERS

BACK TO THE 80s

OUTRUNNERS
EVERYTHING YOU NEED TO KNOW ABOUT SEGA'S AMBITIOUS TURBO OUTRUN SEQUEL

THE HISTORY OF DESTRUCTION DERBY
YOUR CRASH COURSE TO THE EXPLOSIVE PLAYSTATION FRANCHISE

OCEAN FRANCE
WE GO BEHIND THE SCENES OF THE POPULAR 16-BIT SOFTWARE HOUSE

THE MAKING OF PLOK
THE STAFF OF SOFTWARE CREATIONS REVISIT THEIR BIZARRE SNES PLATFORMER

FORMULA ONE
DISCOVER HOW CRL GROUP CRAMMED A GRAND PRIX INTO THE ZX SPECTRUM

PLUS

REVIEWED

STREETS OF RAGE 4
IS DOTEMU'S NEW BRAWLER A WORTHY SUCCESSOR TO THE ORIGINAL TRILOGY?

14-PAGE MEGA FEATURE
THE AWESOME ARCADE HITS, BODACIOUS BUDGET TITLES AND HAPPENING HARDWARE THAT SHAPED GAMING'S GOLDEN AGE

PONG QUEST TIME GAL
HOTEL DUSK: ROOM 215
SPIDER-MAN
SPY VS SPY III
YOSHI'S STORY
LUNAR RESCUE

FUTURE

LOAD 208

THE RETROBATES

DARRAN JONES
Visiting Quay Amusements, my local arcade. Genres formed and evolved so quickly during this period that I was being constantly blown away on an almost weekly basis.
Expertise:
Juggling a gorgeous wife, two beautiful girls and an award-winning magazine, all under the same roof!
Currently playing:
Treasures Of The Deep
Favourite game of all time:
Strider

DREW SLEEP
This humble planet wasn't graced by my appearance until the Nineties. However, if there is one thing I feel like I missed out on when it comes to gaming it's arcades. Eighties arcades sounded epic, and I'm sad I missed out on them.
Expertise:
Remain calm and stay indoors
Currently Playing:
Final Fantasy XIV
Favourite Game of all time:
Final Fantasy VIII

NICK THORPE
I wasn't quite there at the time, but I love the conceptual freedom home computer developers had – you'd never have gotten something like Rock Star Ate My Hamster on consoles back then.
Expertise:
Owning five Master Systems and a Mark III
Currently playing:
Streets Of Rage 4
Favourite game of all time:
Sonic The Hedgehog

ANDY SALTER
Going to the arcades genuinely felt special, probably because at the time nothing you could get at home could live up to the quality of the arcade games.
Expertise:
Modding games, no 'vanilla' versions for me, thanks!
Currently playing:
Mount and Blade 2: Bannerlord
Favourite game of all time:
Rome: Total War

IAIN LEE
The buttons. Big, fat, heavy buttons. Buttons to turn things on and off. Buttons on cassette players. Buttons on the TV. Buttons. Everywhere. Love it.
Expertise:
Buying overpriced stuff on eBay then never touching it
Currently playing:
Forza Horizon
Favourite game of all time:
Elite (BBC Model B)

PAUL DRURY
Looking back, I'd say the spirit of innovation and how every month there seemed to be something new to get excited about. When I was actually living in the Eighties, the best thing was swapping copied games. Sorry.
Expertise:
Judicious use of fuel
Currently playing: The Castle
Fave game of all time:
Sheep in Space

JOHN SZCZEPANIAK
Everything felt eclectic and novel. Even when a developer copied someone else, you probably hadn't seen it before. Today I feel like I've seen literally everything. I need novelty, man.
Expertise:
Japanese game developers
Currently playing:
Brigand: Oaxaca
Favourite game of all time:
Master of Orion

RORY MILNE
Owning one of the low-cost home computers that brought gaming to the masses in the early Eighties, and watching the games made for them evolve from month to month.
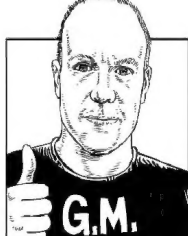**Expertise:**
The game that I'm writing about at the time of writing
Currently playing:
3D Monster Maze
Favourite game of all time:
Tempest

GRAEME MASON
Going into town, buying a Speccy game from Boots or WHSmith, reading the cassette inlay all the way home and then spending all weekend playing it without a care in the world
Expertise:
Adjusting the tape azimuth with a screwdriver
Currently playing:
The Walking Dead Telltale series
Favourite game of all time:
Resident Evil 4

LOADING...

I was seven years old when the Eighties game revolution began, and it's safe to say that those early experiences with videogames led me to where I am today. While I cringe at many of our family photos from that time period – let's just say my sense of fashion was questionable – my eyes light up whenever I find a picture of me proudly holding my Amstrad CPC or the many shots that show me standing in front of a Star Wars or Double Dragon arcade cabinet on our yearly visits to Porthcawl.

While the Nineties was also a great time to be a gamer, things still felt incredibly exciting during the Eighties. Arcade games really came of age and new types of gaming experiences seemed to arrive overnight whenever I visited Quay Amusements. All of my mates were starting to own computers, ranging from the ZX81 to the BBC Micro – and later the Atari ST and Amiga – and people who owned consoles like the Atari 2600 or ColecoVision quickly ascended my friends list.

Games appeared to be everywhere and there seemed to be a game for everyone thanks to the proliferation of budget games and compilations that began to flood the market from the mid-Eighties onwards, while every big-budget film seemed to have an equally big game to go alongside it. Our giant 14-page feature covers all the things that made the Eighties such a great gaming decade, and hopefully it will be as memorable a journey for you as it was for me.

And now we're finally back on sale in the shops, I'd just like to thank every reader who stuck with us during this difficult period. Stay safe and enjoy the magazine.

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We look at the many things that helped make this decade such a great period for gamers

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John Szczepaniak tracks down the team behind Software Creations' quirky SNES platformer

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The Making Of: Eternal Darkness: Sanity's Requiem

Denis Dyack on sanity effects, *Babylon 5* influences and the need to push the boundaries of storytelling

ESSENTIALS

> **We are always looking at new games based on Atari IPs that we can bring to the market. Stay tuned!**
>
> Tony Chien

REINVENTING THE CLASSICS

How Atari is breathing new life into pedigree franchises

» [iOS] When the new developers grew up playing the original game, there's a good chance the remake is in safe hands.

Atari has been in and out of the news for the last couple of years and has been linked to everything from new consoles to hotels. The company is still releasing games, and like 2018's *Tempest 4000*, the newly released *Pong Quest* and *Missile Command: Recharged* are modernised updates of true classics. We spoke to Atari's VP of marketing, Tony Chien, and senior producers Simon Deal and Jason Polansky to find out more.

How do you select which games to modernise?
Tony Chien: The process of selecting which IP to reimagine depends on

various factors, including the concept, audience, platform and developer, among other things. It's always exciting to hear from our fans about which game they would like to see modernised on new platforms, and we certainly consider this in our selection processes.

Why turn *Pong* into an RPG?
Simon Deal: Within the production team, we were ideating on some ideas for how we could bring something fresh to the table. At the same time, we are always looking to build relationships with great developers. We had seen some of the recent titles from Chequered Ink and we

thought they would be a good fit for this project, although at that time we had not aligned on which game we were going to make. We had some discussions with them and one of the ideas they proposed was *Pong* as an RPG. We then proceeded to develop the initial concept in conjunction with Chequered Ink, and that subsequently built into a proposal that was put forward for official greenlight.

With *Pong Quest*, how important was it trying to find a balance between the original game and something a modern audience might enjoy?
SD: That was one of the main challenges of the project; to retain the core gameplay of the IP but to ensure that it was brought up to date for today's audiences. One of the main challenges of the project is that *Pong* is… *Pong*, and so we had to think of interesting ways that could elevate the gameplay. We think we have managed to do this through the different numbers of balls that feature in the battle gameplay. With over 50 different balls, it really does add a great modifier to the *Pong* experience.

» [iOS] *Missile Command: Recharged* has new power-ups that greatly change the core game mechanics.

» [iOS] You can upgrade various aspects of your defences, providing you have the resources to pay for them.
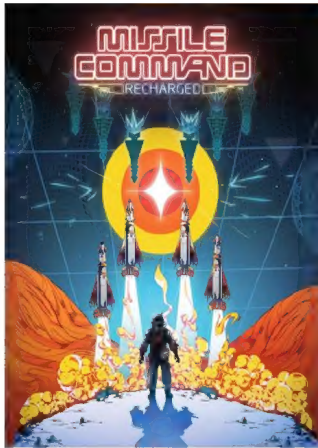
» [PC] Money makes the world go around, and it's particularly useful in *Pong Quest*, too.

At Atari, we feel very privileged to be custodians of Atari's collection of IPs and we are very careful with how we handle these beloved IPs

Simon Deal

» [PC] The reinvented visuals might put off purists, but *Pong Quest* actually offers some solid multiplayer battles.

We found the battle gameplay really shines in multiplayer and this has been seen many times during our own internal playtests.

Did you want *Missile Command: Recharged* to have a distinct look?
Jason Polansky: One of the goals in our internal pitch for the title was to 'make each classic game feel like you remember', so, yes, it was very much intentional! Adam Nickerson, of Nickervisions Studios, was approached early on in the process as his titles evoke a modern retro look and feel. It started with the gameplay, designed to leverage the classic without overcomplicating things. The next step was ensuring the visuals were as straightforward as the gameplay, with simple geometry and not getting bogged down in minute details that you'd find in more modern games. Dressing things up with some particle effects were the finishing touch to give a classic look a delicate modern touch that finds a retro feel that doesn't distract modern eyes.

Do games like *Pong Quest* and *Missile Command: Recharged* have any ties to the original staff? How do you ensure they remain authentic to the Atari brand?
TC: Both *Pong Quest* and *Missile Command: Recharged* were developed by new teams that grew up playing the original games. *Pong* and *Missile Command* are such iconic classics that when we decided to reimagine the games we knew there would be some elements that paid homage to the original, while also offering new game mechanics and twists that made it feel like a new experience on modern platforms.

We know the Atari of today is a vastly different company from the Atari of the Seventies, but are you attempting to recreate that same pioneering spirit?
TC: That pioneering Atari spirit from the Seventies still lives on and serves as inspiration for new games and other projects we develop. Atari is a multimedia brand encompassing games and so much more. Our business sectors include games, licensing, Atari VCS, casino, and cryptocurrency.

Retro gamers were quite taken with *Tempest 4000*. Can you see yourself teaming up with Jeff Minter again?
SD: We were very pleased to see the reception that *Tempest 4000* received. We have a great relationship with Jeff and Ivan at Llamasoft and we'd love to find another project to work on together.

Why choose an in-app purchase model for *Missile Command: Recharged* instead of the more traditional pricing structure of *Pong Quest*?
JP: *Missile Command: Recharged* was designed to serve all possible audiences on mobile platforms. The title is designed as a premium experience with a monetisation structure that accommodates a dominantly free-to-play world on mobile devices. For those wanting that premium experience, a one-time purchase of $2.99 will allow unlimited, unobstructed, online or offline play as if it were a premium title.

Where do you see the Atari gaming brand five years from now?
TC: Our goal is to continue delivering games that our players find engaging, fun and entertaining. That is what Atari has always strived for, and we intend to keep that going for current and future generations. ✱

» [PC] Turning *Pong* into an RPG sounds like a recipe for disaster, but you'll be pleasantly surprised with the results.

TRIVIA

Since we're revisiting the Eighties this issue, here's a test of your gaming knowledge from the decade of bedroom coders and tape trading

1: Which CPU powered the ZX Spectrum, Amstrad CPC and Master System, among others?
A MOS Technology 6502
B Zilog Z80
C Motorola 68000
D Intel 8086

2: When *Double Dragon* was originally exported, what names were given to Billy Lee and Jimmy Lee?
A William and James
B Chainz and Nailz
C Axe and Smash
D Hammer and Spike

3: The May 1984 issue of *Heavy Metal* magazine featured an illustration later used by which Dinamic game?
A *AMC: Astro Marine Corps*
B *Game Over*
C *Army Moves*
D *Freddy Hardest*

4: When shown at American trade shows, what prototype name did the Nintendo Entertainment System go by?
A Advanced Video System
B Advanced Entertainment System
C Video Entertainment System
D Family Computer System

5: Which magazine did Future Publishing introduce as its debut title in 1985?
A *Amstrad Action*
B *ACE*
C *New Computer Express*
D *ST/Amiga Format*

6: Which of these Eighties films never received a videogame adaptation?
A *The Running Man*
B *Rambo III*
C *Bloodsport*
D *Lethal Weapon*

7: Japanese Mega Drive owners only received four third-party games in 1989. Which came out first?
A *Curse*
B *Thunder Force II*
C *Herzog Zwei*
D *Super Hydlide*

8: Sir Clive Sinclair won the first final of Celebrity Poker Club. Which of these players did not take part in the final with him?
A Keith Allen
B Zac Goldsmith
C Craig Charles
D John McCririck

9: "Business is war." Maybe so, but which of these Eighties executives said it?
A Alan Sugar
B Steve Jobs
C Jack Tramiel
D Hiroshi Yamauchi

10: Four of Capcom's NES games sold over a million copies, but which one sold the most?
A *Mega Man 2*
B *Mega Man 3*
C *Commando*
D *Ghosts 'N Goblins*

11: After the failure of the Konix Multisystem, which console did its engineers go on to develop?
A Atari Jaguar
B 3DO
C Amiga CD32
D Apple Bandai Pippin

12: In which year did Electronic Arts release its first *John Madden Football* game?
A 1985
B 1986
C 1987
D 1988

WORD SEARCH

Each of these 16 manufacturers released computers during the Eighties – some to greater success than others. All of them can be found in the grid here – have at it!

Q	I	N	S	I	N	H	K	P	O	D	E	A	K	S
Z	Z	J	D	H	H	E	N	Z	A	Z	X	G	U	O
A	R	K	R	T	X	W	C	A	M	C	O	R	D	R
Y	R	L	A	W	C	T	R	I	S	I	O	N	O	D
O	J	B	G	O	G	A	I	Y	T	S	G	R	S	S
E	W	C	O	M	M	O	D	O	R	E	B	D	N	K
K	O	A	N	P	S	Z	C	D	A	M	J	T	U	T
J	R	N	H	I	H	A	T	D	W	U	S	V	B	
S	I	N	C	L	A	I	R	X	Q	R	T	B	C	C
Z	C	K	M	R	R	E	H	W	G	I	A	D	A	N
S	E	L	X	A	P	O	U	N	J	P	T	G	Q	T
X	I	P	T	U	P	Y	C	U	S	N	U	X	O	A
B	Y	A	S	W	C	P	F	P	M	E	N	F	W	N
Z	I	B	M	G	I	P	L	U	A	W	G	D	T	D
W	E	L	I	X	A	X	L	E	A	Q	T	A	U	Y

Acorn
Amstrad
Apple
Atari
Commodore
Dragon
Fujitsu
IBM
NEC
Oric
Sega
Sharp
Sinclair
Sord
Tandy
Tatung

PICTURE QUIZ

Here are two very similar screenshots of Eighties mega-hit *Super Mario Bros*, but we've doctored one of them because we're fiendish devils when we want to be. There are five differences between the two images – can you find them all?

Word Search
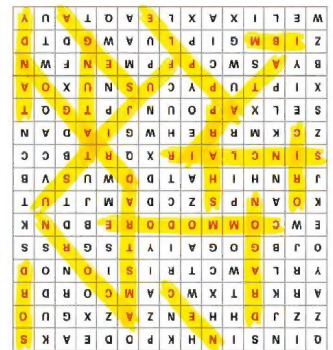
Picture Quiz
1: Mario's name changed to Martin
2: Extra air bubble above Mario's head
3: Coin count altered from 87 to 78
4: Cheep Cheep changed to Blooper
5: One coin has been removed

Trivia
1:B, 2:D, 3:B, 4:A, 5:A, 6:C, 7:B, 8:C, 9:C, 10:D, 11:A, 12:D

F U T U R E

is supporting our frontline workers

Be **Careful**

Be **Kind**

Be **Responsible**

Stay home to fight Covid-19

#frontlineworkers #stayathome

My old man's a dodgepot

It seems weird to think that my dad was integral in getting me into gaming. It's weird because he was the most computer-illiterate person I ever met. He died seven years ago, but thinking on it, I'm pretty sure he never even had an email account in his life.

He was my gateway to this magical world I'm still in love with. One night, my sister and I were allowed to stay up late as dad was bringing home something very special for us. This was a common occurrence. Dad ran the props department at the BBC and throughout our childhood he was always bringing back 'something special'. This usually meant 'something stolen'. Highlights include a Betamax video recorder (it was the first in the street, but we weren't allowed to tell anyone about it), the Grifter bike that belonged to Pogo Patterson from *Grange Hill*, and a Dalek. An actual Dalek.

But that night he brought back a computer. In late 1982, no one really knew what a computer was or what it did. So when he did eventually get home and showed us this huge box, Joanne and I were blown away.

I remember a white polystyrene box, books, some tapes, a lot of cables and this beautiful light-olive-coloured beast. Having literally NEVER SEEN A COMPUTER IN MY LIFE (I had to type that in capitals to remind myself just what an amazing sentence that is), the Dragon 32 I was presented with was the sexiest thing in the universe. Dad set it up and spent ages trying to tune in the TV to get it to work. Mum was close to sending us all to bed as it was taking so long, but somehow we persuaded her that this was extremely important. Eventually, even she got into it and became quite excited – again, she has NEVER had an email address. What is wrong with these people?

And then, slowly, a green image came into focus. We were in. Dad connected the tape player and typed some words on the keyboard. They actually appeared on the screen! Suddenly the television, which had always been a passive experience, was now interactive. We could make things happen on there. A game was loaded and life changed forever. I was hooked. I'd found my first addiction (sadly, there would be many more as I grew up!) and it allowed me to enter an infinite number of universes.

I have no idea where that Dragon came from or why dad chose it. It's literally just occurred to me as I type this that it was almost definitely stolen. Most probably someone rocked up to work and offered it to my old man. He saw an opportunity and took it, for which I am eternally grateful. A few years later, he sold it to my uncle at an overly inflated price, convincing him it was a bargain. It wasn't and it caused a huge rift in my family. ✱

> **"I have no idea where that Dragon came from or why dad chose it"**
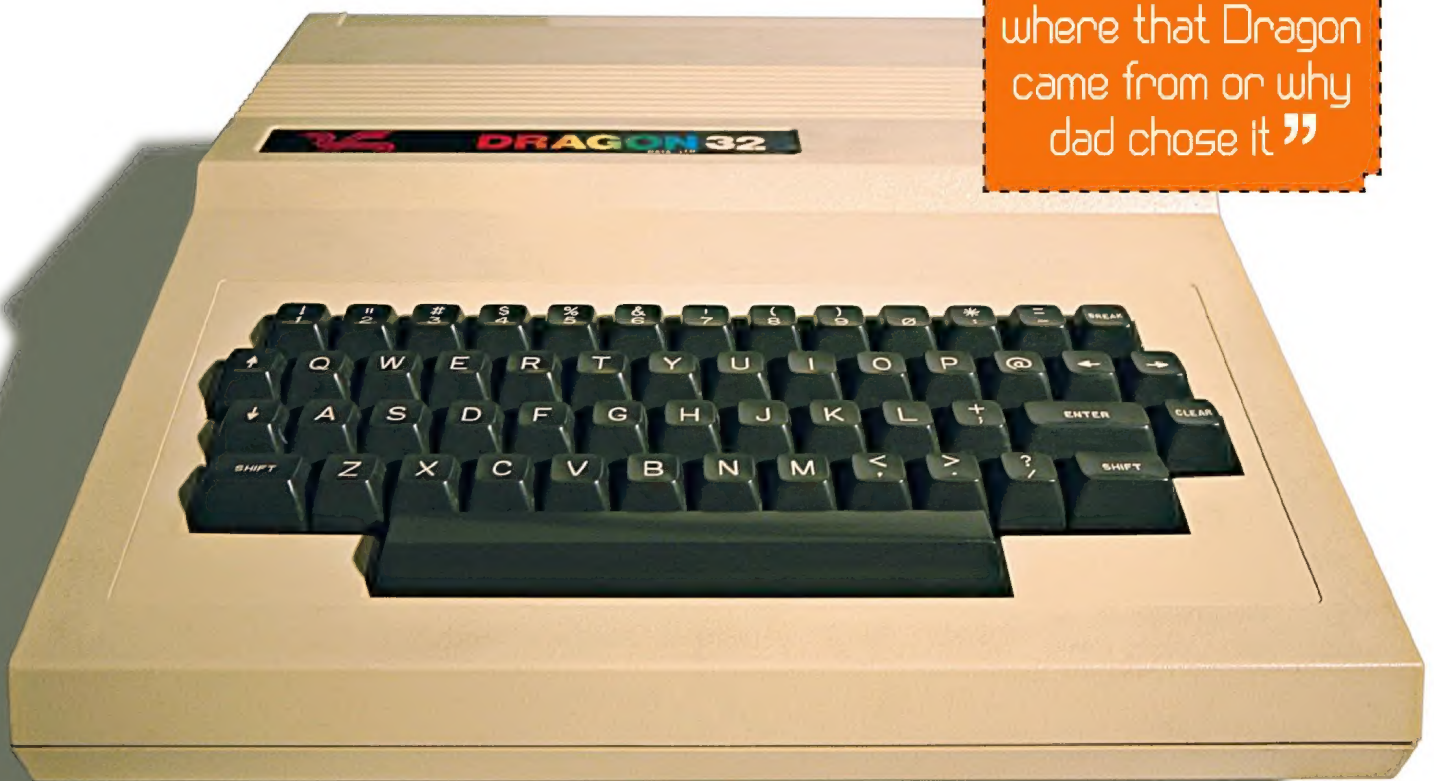
PAPER POWER

60% of the energy used to produce paper and paper packaging in Europe comes from renewable sources.

Discover the story of paper
www.lovepaper.org

LOVE PAPER

What the hell?

'**ve got a confession to make.** Pour yourself a stiff one, peel your ears back and settle down, because what you're about to read may cause you to gasp so hard that your trousers fall off.

As I write this, some 100 days or so into lockdown – I'm fairly confident that by the time you read this we'll still be in that situation, to a greater or lesser extent – I've realised I've got no massive interest in videogames. Old, new, somewhere in between... I've barely touched a game controller in the last three months.

Even *Doom Eternal*, which I'd been looking forward to, I've left unfinished. Likewise *Streets Of Rage 4*. I played it for a few days, but then realised I was playing it because I felt I should be playing it... not because I really wanted to.

> **" I read the other day that our brains aren't designed to process the amount of rapid change that we've all been through this year "**

I've not dipped back into the games that once gave me comfort. I've not read gaming news. Not watched a single playthrough on YouTube. Games just aren't providing the distraction, or succour, that I need right now.

Games sales are – apparently – one of the few areas of sales growth during this weird time, but whatever it is that I normally look for in games, I'm not getting.

I appreciate that this might be a strange admission coming from somebody who's writing a column for a magazine dedicated to retro gaming, but it is what it is. I'm writing this because I want to tell myself, and any of you reading this who may find yourself in a similar position, that it's okay. Give yourself what you need the most.

I read the other day that our brains aren't designed to process the amount of rapid change that we've all been through this year. Typically, when I play a game I switch off from the outside world, but at present I'm either not able, or not willing, to do that. The situation we're living through is always intruding into my thoughts. I've been staying off social media too, for the most part, because I can't handle the noise of it.

We're all wired differently. We have different comfort blankets. We process things in ways that are unique to us. I'm finding myself veering between needing emotional connection with loved ones, and wanting to be isolated in my own protective bubble. And it turns out that there's no room in there for a games machine.

I've had times in my life before where I wafted away from gaming for a while. Right after I left *Digitiser* I put down my controller, and didn't pick one up again for the best part of a year. I'd had a decade where games were my job as well as my hobby, and I'd had my fill. It took a while for that indigestion to ease.

And I know that eventually, as then, my urge to play games will return. It's hewn right through me. Cut me and I bleed pixels and polygons, and I normally wear my gamer credentials on my sleeve.

Not right now, though. And that's okay. Hope you're all safe. ★

Do you agree with Paul's thoughts? Contact us at:

RetroGamerUK 📘   @RetroGamer_Mag 🐦   retrogamer@futurenet.com ✉

Inside the polygon museum

Leo Burke on his tribute to Nintendo 64 racing games

The **Nintendo 64 had a multitude of racing games and one person who knows this better than most is Leo Burke.** After becoming fascinated with some hidden code he found in *AeroGauge*, he decided to create a tribute to N64 racers by creating a virtual museum. Here he tells us how it happened.

How did you come up with the concept of Auto Museum 64?

It had been on my mind for a while, after originally discovering the method of model extraction. The first game I tried was *AeroGauge*, which is where I found the hidden smiley faces in unused texture data. It made me think about all the people who worked on the games and I wanted to put names next to their work under one roof.

How difficult is it to extract these models from the N64?

It ranges from very easy with no texture work to do at all, to incredibly time intensive with multiple textures to correct the mapping of. The easiest models were from *California Speed* and *Hydro Thunder*, as they required no fixing at all. The hardest one by far was *Beetle Adventure Racing*. It took about four hours to fully restore one car, but *Beetle Adventure Racing* is a favourite of mine so I wanted to get it in.

Do all the vehicles share similar amounts of polygons, or are some more detailed than others?

Penny Racers, *Nascar 2000* and *Destruction Derby* both had very simple models and textures, probably because those games have a lot of cars on-screen. The most detailed I would say are the cars from *GT64*, because they are real-world cars with very distinct shapes and liveries.

Is there any reason why you've not added games like *F-Zero X*?

Sometimes the restoration process was too difficult. In the case of *F-Zero X* all the textures it uses are 32x32 and are also not coloured in memory, and I really didn't have a good starting point to even attempt to fix them. I considered adding models from *Star Wars Episode I: Racer* but Disney is defensive of its IP.

What cool programming things have you discovered while looking for suitable models?

I recently saw a video detailing how the N64's texture limitations were down to its RDU 'Reality Display Unit' limited texture cache. Games could have a texture with a mipmap generated but they were limited to 32x32. To get around this it seems like developers would load textures directly from the cartridge so they could get 64x64, and that seems to be the case for a lot of these cars, which are displayed close to the camera and therefore don't need mipmapped textures.

Out of all the models you've worked on, which one has impressed you the most and why?

Certainly the *AeroGauge* models. They are incredibly striking in their liveries and shapes. I didn't do the models for every game except for *AeroGauge*, which all required a bit of fixing, because they were so well done. *AeroGauge* is kind of an obscure game, so I wanted more people to see them. *Ridge Racer 64* was the other game that I really liked because the car designs are very well done, especially the texture work.

Any plans to create a museum for Saturn, PlayStation or arcade racers?

I have the greatest personal connection with the Nintendo 64, as that's the system I had growing up and so that's where my interests are. I don't think I'll be making any museums for different gaming systems, but I don't think anyone else has made a dedicated museum to old game models before, and perhaps this will inspire other developers to do something similar! *

» [PC] Leo would like to thank Ian Herbert for his excellent Blender tutorials as they were essential for making Auto Museum 64

» [PC] The ability to zoom in allows you to really appreciate each vehicle's design work
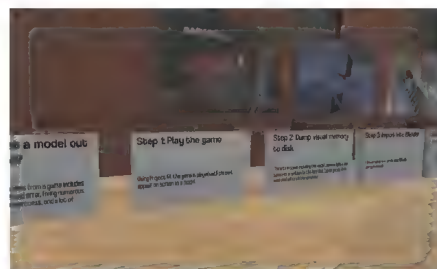
» [PC] The presentation is great. It's like you're wandering around a real museum
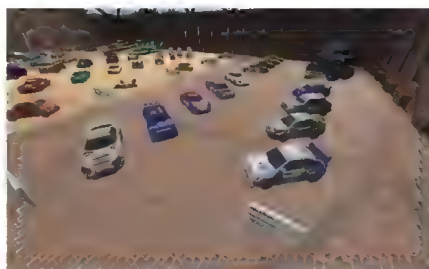
» [PC] A handy jump option gives you a great overview of the museum's many vehicles

» [PC] If you're interested in taking a tour of Leo's virtual museum you can find it at https://leoburke.itch.io/auto-museum-64

JULY 2003 – It's that time of year when games journalists return from E3 with fond memories of overcrowded convention halls, cheap junk food and inappropriate whooping in press conferences. What made it all worthwhile? Nick Thorpe investigates

[PS2] We've reached the era where publishers don't care about representing the in-game experience in promotional screenshots

NEWS
JULY 2003

On 5 July, the World Health Organization declared Taiwan to be free of SARS, after 20 days in which no new cases were reported. The nation had been the last remaining hotspot for the respiratory illness, which had first presented in November 2002 in China, and had been the most-affected region after mainland China and Hong Kong.

At Wimbledon, Serena Williams won her second consecutive championship by defeating her sister Venus in the finals on 5 July. The following day, Roger Federer won his first Wimbledon championship, defeating Mark Philippoussis in the final to become the competition's first male winner from Switzerland

Dr David Kelly, a weapons expert who advised the UK government on biological warfare, was found dead on 18 July having committed suicide the previous day. The government had claimed that Iraq could deploy biological weapons within 45 minutes, but following allegations that these had been included to 'sex up' a dossier and provide justification for going to war, Dr Kelly became the subject of scrutiny. Though some still question the circumstances of his death, the Hutton Inquiry and a later review by the attorney general Dominic Grieve both concluded that the balance of evidence suggested suicide.

THE LATEST NEWS FROM JULY 2003

The UK's games press has delivered its verdict on E3, and it was not an overwhelmingly enthusiastic one. Console market leader Sony delivered a major announcement in the form of a new handheld, the PlayStation Portable – something described by Ken Kutaragi as "the Walkman of the 21st century". Edge noted that, "Given the absence of anything other than a specs list for the actual machine, cynical minds are quick to point out that this is Sony's way of bolstering [...] an otherwise lacklustre pre-E3 conference." Edge wasn't alone in that assessment

as games™ also felt that Sony's offering "smacked of complacency or lack of planning", as the PS2 manufacturer's "software line-up and broadband service seemed somewhat underdeveloped". Gran Turismo 4 was the key first-party exclusive, with Metal Gear Solid 3: Snake Eater and an untitled future Grand Theft Auto game confirmed as third-party exclusives for 2004.

Nintendo didn't come across much better. In what Games™ described as "a fairly muted showing", the company presented statistics that Edge felt were "carefully selected – even by stats standards – around

the US release of The Wind Waker to paint a rather unrealistic picture of the actual situation Nintendo faces". Though Mario Kart: Double Dash!!, F-Zero GX, Metal Gear Solid: The Twin Snakes and Star Wars Rogue Squadron III: Rebel Strike were considered exciting, games™ felt "the Japanese giant floundered somewhat with its over-reliance on 'connectivity'", involving the GameCube's ability to connect to the handheld Game Boy Advance, while "cautious publishers were ditching the GameCube (in a way reminiscent of the dark days of the Dreamcast)".

With the N-Gage presentation failing to generate any notable excitement – especially after announcing a $299 price point Edge considered "the absolute most Nokia could have charged" – Microsoft didn't face much competition for the best E3 showing. "While there were few surprises, what it did show was generally of the highest calibre, with the early preview of Halo 2 being one of the highlights of the show," reported games™. Apart from that, True Fantasy Live Online, Ninja Gaiden, Project Gotham Racing 2 and Rare's debut Xbox title Grabbed

[GameCube] Silicon Knights stepped up to develop Metal Gear Solid: The Twin Snakes, with guidance from Kojima

[Xbox] Rare's Xbox debut had about $375 million worth of expectations attached. No pressure, right?

[Xbox] Almost none of the work that went into the E3 2003 *Halo 2* demo actually made it to the final game!

[PC] Enter a virtual world where everyone is pretending to inhabit a virtual world designed to resemble the real world.

[Xbox] Lots of people were buying *Brute Force*, but the press certainly didn't think much of it.

By The Ghoulies were the highlights of what *Edge* described as a "confident, polished, short and sharp presentation".

PC players also had plenty to look forward to, with *Half-Life 2* unsurprisingly receiving effusive praise from all who managed to spend some time with it. Elsewhere, sequels were the order of the day, too. *Deus Ex: Invisible War* was set to follow up Ion Storm's groundbreaking original, EA was hoping that *The Sims 2* would replicate the colossal success of the original, and *Thief III* was set to continue the stealth legacy of its predecessors. Original ideas were on show too, as *The Matrix Online* tried to simulate a world that was a simulation of our world, while the visually stunning *STALKER: Oblivion Lost* offered players a first-person jaunt around Chernobyl.

Third-party publishers had plenty to show off, too. Among the major titles on show were EA's *Medal Of Honor: Rising Sun* and *Need For Speed Underground*; Activision's *True Crime: Streets Of LA* and *Tony Hawk's Underground*; Capcom's *Monster Hunter* and *Resident Evil: Outbreak*; Konami's *Castlevania: Lament Of Innocence* and *Boktai*; Sega's *Billy Hatcher And The Giant Egg* and *Sonic*

Heroes; Ubisoft's *Beyond Good And Evil* and *Prince Of Persia: The Sands Of Time*; Square Enix's *Final Fantasy: Crystal Chronicles* and *Sword Of Mana*; Namco's *Breakdown* and *R: Racing Evolution*; LucasArts' *Star Wars: Knights Of The Old Republic* and *Armed & Dangerous*, and Eidos' *Legacy Of Kain: Defiance*. The imminent Eidos game *Tomb Raider: The Angel Of Darkness* was also on show, but review copies weren't supplied in a particularly timely fashion, meaning that many players will have bought it blind.

Of course, those games that had made it to review before selling well were hardly stellar in the first place. GameCube number one *Sonic Adventure DX: Director's Cut* scored 5/10 in *Games™*. Although the reviewer felt that "on the gameplay side, there's more than enough here to keep any *Sonic* fan happy", the quality of the port was criticised as "the levels judder along and go from 'quite smooth' to 'all over the place'". The game also earned 6.1/10 in *Cube*, with the reviewer complaining that it was "not how you bring a game from a dead console into the next generation", and concluding that for the £40 asking price "you could get a second-hand Dreamcast and a whole load of games".

Brute Force was a key Xbox Live offering but *Edge* was unimpressed with the game, which Microsoft had been "touting as the next *Halo*". It was considered "occasionally entertaining, albeit in a predictable way" and "certainly not the groundbreaking squad-based *Halo*-beater we were promised", earning a score of 5/10. Similarly underwhelmed was *Games™*'s reviewer, who complained that "fighting enemies requires little more than strafing from side to side while placing the gunsight over your target and firing repeatedly, because anyone firing at you stands perfectly still and becomes a sitting duck" in the magazine's 4/10 review.

Join us again next month, when E3 will be over but the summer slump will probably still continue. Isn't that exciting? ✱

CHARTS

JULY 2003

PLAYSTATION 2
1 – EyeToy: Play (Sony)
2 – Tomb Raider: The Angel Of Darkness (Eidos)
3 – Formula One 2003 (Sony)
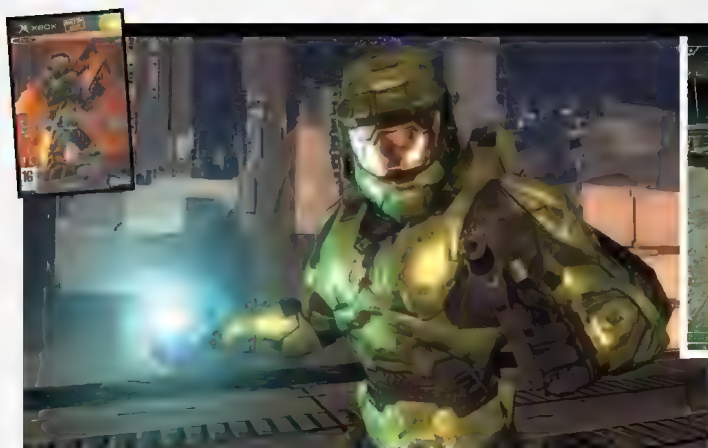4 – SOCOM: US Navy Seals (Sony)
5 – Enter The Matrix (Atari)

XBOX
1 – Brute Force (Microsoft)
2 – Midnight Club II (Take 2)
3 – Soldier Of Fortune II: Double Helix (Activision)
4 – Halo: Combat Evolved (Microsoft)
5 – World Championship Snooker 2003 (Codemasters)

GAMECUBE
1 – Sonic Adventure DX: Director's Cut (Sega)
2 – The Legend Of Zelda: The Wind Waker (Nintendo)
3 – WWE WrestleMania X8 (THQ)
4 – Wario World (Nintendo)
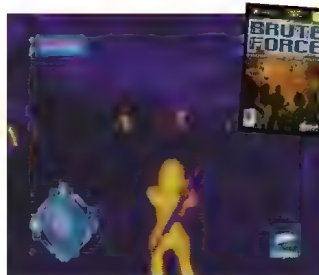5 – Super Smash Bros Melee (Nintendo)

MUSIC
1 – Crazy In Love (Beyonce)
2 – Hollywood (Madonna)
3 – Feel Good Time (Pink ft William Orbit)
4 – Real Things (Javine)
5 – Bring Me To Life (Evanescence)

THIS MONTH IN...

Play
"The enemies are as dumb as cows in body armour," says *Play*, reviewing *Enter The Matrix* since it didn't make last month's issue. "You'll sometimes observe a policeman trying to run into a desk," adds the reviewer. "It adds nothing to the sum total of the artistic accomplishments of videogame history." So obviously, it scored 80%.

Edge
Inevitably, E3 results in talk of booth babes. "It's all about getting noticed. Hire in a couple of large-breasted girls and the nerds will flock," says *Edge*, opening its Out There section. "*Edge* even heard a rumour that one booth babe applicant, after a rejection, went back for an 'audition' after surgical enhancement and got the job." Blimey.

Cube
"I don't believe Nintendo 'fans' should own other consoles, I never have," says the rather angry Frankie from Liverpool in the letters pages. "You guys at *Cube* have been predicting doom and failure," he continues. "If all else fails, Nintendo and Sega will unite to create a super console that will eradicate all enemies." Sure thing, buddy.

SCORE-2

SCORE-1 04540

FUEL 780

TAITO 05900

Lunar Rescue

IT'S OH SO QUIET...

» ARCADE » 1979 » TAITO

It can't have been easy for Taito to produce a follow-up to the all-conquering *Space Invaders*, yet just before the end of the Seventies, its team of talented devs came up with this quirky little gem.

Lunar Rescue combines elements of its famous forebear, notably the look of the aliens and the sounds as you blast them, with Atari's *Lunar Lander*, released earlier the same year.

Leaving the shelter of the mothership, you must guide your craft through a deadly asteroid field, land on a series of rocky platforms and collect astronauts stranded on the moon's surface. The asteroids then mysteriously morph into UFOs, requiring you to shoot your way back to safety.

The game has lots of lovely touches, from the way the desperate astronauts wave to their potential rescuer and scurry to the ship when it successfully lands, to their terrified screams if you botch the docking. There's even an interlude after round three – where your foes declare they're up for the fight – which predates *Pac-man*, usually credited with containing the first cutscene in a videogame.

But what I like most about the game is the dramatic pause. Shoot-'em-ups back then were relentless affairs, barely giving you time to wipe your sweaty palms on your stone-washed jeans before forcing you to grip the joystick and hammer the fire button once more. I would cherish the few seconds respite in *Missile Command* as your remaining cities were totted up, or the moments of quiet between waves in *Galaxian*, but nothing compared to *Lunar Rescue*. If you spare exactly five aliens on an ascent, the next time you are tasked with returning to the mothership, it remains motionless, and after dodging a few giant meteors, you can let go of the controls and watch your ship float gracefully home.

Back then, those precious 12 seconds of calm allowed me to take a drag from the fag precariously balanced on the control panel and feel invincible. Now, I use them to wonder if I could get away with stone-washed jeans again. ✱

BACK TO THE 80s

ALTHOUGH IT STARTED IN THE SEVENTIES, GAMING TRULY EXPLODED IN THE EIGHTIES AND IN DOING SO, IT DELIVERED SOME OF OUR BEST GAMING MEMORIES, FROM BUDGET TITLES TO MAGAZINES CRAMMED WITH THE LATEST REVIEWS. HERE, ICONOCLASTS FROM THE PERIOD EXPLAIN WHY IT WAS SUCH A GREAT DECADE

WORDS BY DARRAN JONES AND NICK THORPE

Everyone has their favourite period for gaming, whether it's the embryonic stages of the Seventies, or the three-generation span of the Nineties that saw 8-bit systems dying while 32-bit consoles kicked off the 3D revolution. For many of our readers, we're guessing the Eighties was their favourite period for gaming, and in all honesty it's not hard to understand why.

While there were great games and hardware around in the Seventies, everything exploded in the following decade and the wealth of choice was truly staggering. Home computers largely dominated this period, building on the foundations that had been started in the previous decade by companies like Apple, Atari and Commodore. As home micros became more affordable in the Eighties and highlighted the strengths of videogames, computer magazines became prolific and many focused more on games, delivering type-ins you could try out, and later supplying cover tapes with independent and commercial games on them.

This influx of home computers naturally led to youngsters wanting to push the limits of what was possible,

and as a result bedroom coders began to appear. John Romero and Jordan Mechner were just a few of the coders tinkering away in the US, primarily on Apples and Ataris, while various Sinclair, Amstrad and Commodore systems paved the way for the likes of David Perry, the Oliver twins and Jeff Minter in the UK.

The Eighties was also a period when the gaming industry began to 'grow up'. While big companies like Apple, Activision, Commodore and Atari certainly existed in the Seventies, more and more publishers appeared in the following decade. Ordering games by mail order was still possible, but it was becoming increasingly easier to find games in shops and even your local newsagent.

While a multitude of computers were released in the Eighties, let's not forget the consoles of the period. Atari was a prevailing force with various systems from the 5200 to the Lynx debuting in the decade, and while the US console crash affected the industry, the Atari name remained synonymous with gaming for most of the Eighties, and it was only matched by Nintendo after the Japanese giant began to dominate the US post-crash. Sega's Master System fared better in Europe, and by the latter half of the decade it was obvious that consoles were on the rise, although many of those 8-bit systems struggled to take the shine off the 16-bit computers that began appearing during the mid-Eighties.

As the decade continued, genres began to evolve, or even appear, while arcades continued to lead the hardware charge that had first began in the Seventies. Developers began to think outside the spaceship and vehicle avatars that had become so popular in the previous decade, and actual characters began to appear, some of which are now the most recognisable stars in the world. The following pages will highlight the above, and many other aspects of the decade which made the gaming scene so much fun to be a part of. We hope you enjoy the ride. ▶

ALISON BEASLEY
PR for Mastertronic

GARY BRACEY
Software Director for Ocean Software

JULIAN 'JAZ' RIGNALL
Games journalist for Zzap64!

CHRIS ABBOTT
Owner of C64 Audio

DAVID CRANE
Cofounder of Activision

PAUL HUGHES
Graphics artist for Ocean Software

PHILIP OLIVER
Co-creator Of Dizzy

MY FAVOURITE LOADING SCREENS

OCEAN ARTIST MARK R JONES ON HIS FAVOURITE COMPUTER ART

ESKIMO EDDIE BY F DAVID THORPE
ZX SPECTRUM, 1984

"One of the very first screens I ever saw where some precise work into the placing of the attributes had been done. I thought this looked beautiful at the time and showed me how good a loading screen could be if done by someone with the right skills."

HARDCORE
HARDWARE

WHILE IT'S THE GAMES EVERYONE LOVES, A BIT OF 'MY MACHINE'S BETTER THAN YOURS' IS ALWAYS FUN – AND IN THE EIGHTIES, THERE WAS A GREATER CHOICE OF HARDWARE THAN EVER BEFORE OR SINCE. WE PRESENT A SELECTION OF THE MOST NOTABLE MACHINES

PC
1981
The PC you play today bears little resemblance to IBM's original machine, and it took years to come into its own as a gaming platform, but the sheer impact of computing forever.

VIC-20
1981
Commodore's home computer was a minor phenomenon, becoming the first computer to ever sell a million units. Soon superseded, it still provided many with a great first experience.
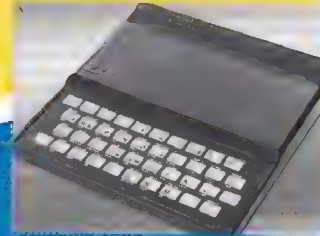
ZX81
1981
Available in pre-built and kit forms, Sinclair's follow-up to the ZX80 was incredibly limited but very cheap. Most games of note required the 16K RAM pack add-on to even run.

BBC MICRO
1981
Acorn's 8-bit computer was a fixture in schools and saw plenty of educational games, but its high price made it a hard sell for home audiences. That said, Elite will always be great.

VECTREX
1982
GCE's self-contained console boasted a vector display, allowing for a true arcade look. It was well-received by critics, but the prevailing market conditions cut it down before its time.
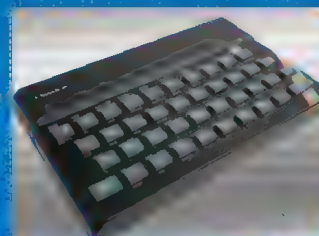
ZX SPECTRUM
1982
By adding colour graphics capabilities to its newest machine while retaining a low price point, Sinclair created a huge hit in the UK and other European markets.
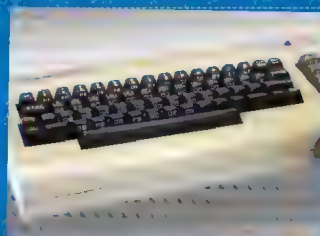
COMMODORE 64
1982
This machine's power, combined with Jack Tramiel's willingness to undercut the competition, meant that for many years it was the best selling computer ever made.

MSX
1983
This attempt to provide a computer standard never took off as envisioned, but was popular in places such as Japan and the Netherlands, and supported well by the likes of Konami.
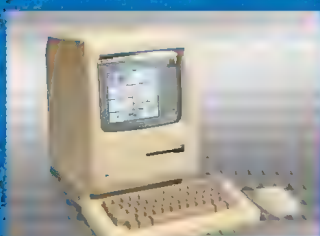
MACINTOSH
1984
The first in Apple's line of computers was not really aimed at our audience, with its monochrome display, but some fun games allowed business types the occasional distraction.
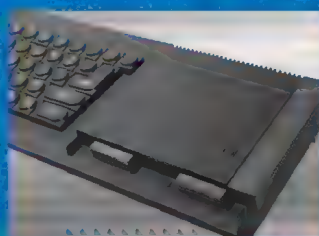
SINCLAIR QL
1984
Sir Clive's attempt to hit the business market met with hardware problems and little interest, while a lack of games cut off the Spectrum audience. Sinclair Research never recovered.

AMSTRAD CPC
1984
Alan Sugar's box of tricks couldn't overcome the head start its rivals had, but was a very capable machine in the right hands, with colourful (if chunky) graphics.

NES
1985
After taking the lead in Japan's console market with the Famicom, Nintendo brought its 8-bit hardware west and revived the American console market with a massive hit.

PC ENGINE
1987
Hudson Soft's efficient chip design crammed a huge amount of power into a small space. Magazine coverage sent readers crazy, but it never officially arrived here – a real tragedy.

ATARI XEGS
1987
A direct console version of the Atari 8-bit range, which attempted to bridge the gap between the computer and console markets. A neat idea, but one that lacked lasting power.

ACTION MAX
1987
This console looked to use your VCR to provide lifelike gaming, but the reality was so limited as to be barely interactive at all. It garnered little interest then, and that doesn't change.

MEGA DRIVE
1988
Sega's 16-bit effort offered near arcade-quality graphics in the home, but software support – and a UK release – took a while to arrive. By the time they did, the Nineties had already begun.
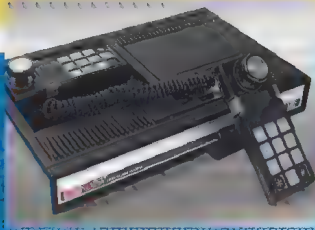
COLECOVISION

1982

● Bringing the fight to Atari, Coleco leaned on quality arcade conversions and a range of hardware add-ons. A promising start was scuppered by the videogame market crash of 1983.

ATARI 5200

1982

● This successor used the powerful Atari 8-bit home computer as its basis. A lack of backwards compatibility and dodgy joysticks meant that it soon struggled in the marketplace.

DRAGON 32

1982

● Made in Wales and bearing the patriotic branding to prove it, this machine was initially quite popular but limited capabilities stifled it. Dragon Data would fold two years later.
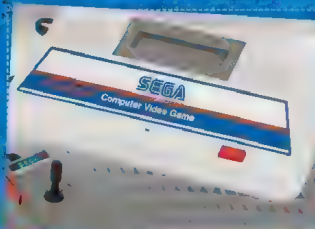
SG-1000

1983

● Sega's first home console offered similar capabilities to the ColecoVision – which immediately put it behind Nintendo's Famicom. It sold better than expected, but was quickly outmatched.
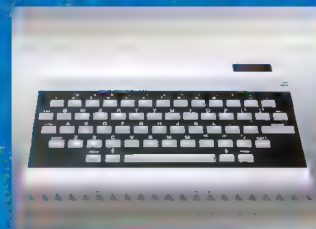
ORIC-1

1983

● This surprise success for Tangerine Computer Systems sold particularly well in the UK and France by matching Sinclair's pricing, giving way to the Atmos – a flawed and failed successor.
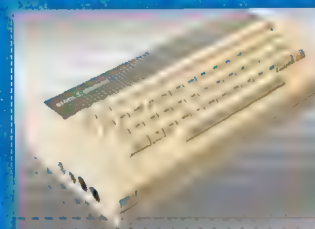
ACORN ELECTRON

1983

● The BBC Micro's cut-down cousin wasn't a patch on the real thing, but while it didn't trouble the bigger players, it did offer enough value that it found a loyal audience in the UK.

AMIGA

1985

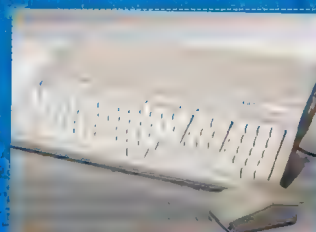● Commodore's line of 16-bit computers offered strong multimedia capabilities, but at a price. The line didn't take off as a gaming platform until 1987's cheaper Amiga 500.

ATARI ST

1986

● Atari's 16-bit computers were cheap enough to ensure a wide audience was built quite quickly, but its weaker gaming capabilities saw it fall behind the Amiga after the Eighties.

MASTER SYSTEM

1986

● Rebranding its Japanese Mark III hardware, Sega followed Nintendo west. It was the leading console in Europe, at a time when consoles played second fiddle to computers.
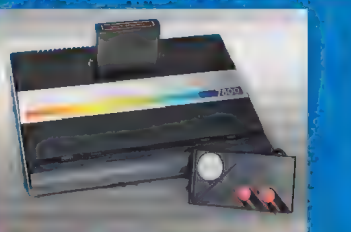
ATARI 7800

1986

● Shelved following a test launch, the 7800 was a far better successor to the Atari 2600 than the 5200 had been. Unfortunately, its sound capabilities left a lot to be desired.

FM TOWNS

1989

● Fujitsu's computer had a 32-bit CPU, a built-in CD-ROM drive, a beautiful design and plenty of desirable games. What more could you want? Well, a UK release would have been nice.

GAME BOY

1989

● Nintendo's modest handheld pulled no punches when it came to software. With *Tetris* and *Super Mario Land* at launch, its cost and battery life advantages were just icing on the cake.

LYNX

1989

● Atari's colour handheld was a true powerhouse, offering features that home hardware couldn't provide. Hungry for batteries and starved of software, it fell behind the competition.
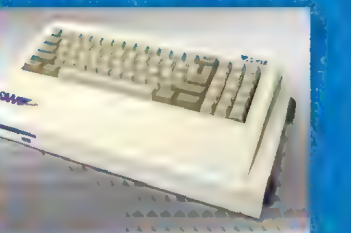
SAM COUPE

1989

● Hosting an 8-bit CPU while boasting of 16-bit performance, this machine from Miles Gordon Technology missed the Christmas rush and its owners were bankrupt by the summer.

AWESOME ARCADES

IN THE EIGHTIES, IF YOU WANTED THE ULTIMATE IN GRAPHICAL TECHNOLOGY AND BRUTAL CHALLENGE, THERE WAS ONLY ONE PLACE TO GO – YOUR LOCAL ARCADE. WE LOOK BACK AT AN AGE WHERE THE COIN-OP SCENE WAS STILL THE ENVY OF THE GAMING WORLD

» [Arcade] Cabinets had to be built to take abuse – not just cigarette burns and spilt drinks, but also hardcore button punishment.

During the Eighties, computers of any kind were expensive, and they had to be built for a general purpose. Not so with arcade machines – every penny spent on making them was geared towards ensuring that they were really, really good at running games. As a result, they technologically outstripped anything in the home. "That was the main allure of arcades – being able to spend a few coins to play something that was so far more advanced than the microcomputer and console titles of the period," says Julian Rignall, an arcade expert who went on to a career in games journalism. "Games like *Pole Position*, *Dragon's Lair*, and *Star Wars* were all a quantum leap ahead of what

was available for home systems and they all delivered stunning gameplay experiences that were immersive, addictive and tremendously exciting. That was an incredibly strong draw for any red-blooded gamer."

Of course, going to the arcades also meant getting out of the bedroom. "If you went to an arcade regularly, you'd inevitably get to know the other players that frequented the place because you'd chat to them while waiting your turn to play a particular game," says Julian. "For me, it was akin to some kind of gaming club, and I feel many provincial arcades offered that kind of experience to their regulars." Of course, getting enough guys into a room together inevitably

means that competition will break out, and Julian thrived in that environment. "I was very lucky in that my local arcade had some really good players who regularly frequented the place, and that made for a very competitive scene. We were constantly trying to beat each other's high scores and we'd keep records on who had the highest score on which machines." But the competition was friendly, and tips were shared openly. "I think much of that was to do with the fact that one's gameplay experience was public – people could and would simply stand there and watch you play, especially if you were good at a game."

The excitement when a new game was arriving was palpable. "We always knew when there was going to be a new delivery because the arcade technicians would start moving machines about to make room for the new one, and at that point we'd start asking questions," Julian recalls. "Was it an upright or sit-down cabinet? Had they played the game or did they know what it was?" But without the kind of hype cycle that games have today, each game was an unknown

quantity until the engineer switched it on. "Once he'd checked that it was working fine, it would be turned over to us players so we could start playing. And that's when things would start getting very exciting as we began to figure out how to actually play the game. In cases such as *Mr Do!*, *Dig Dug*, *Frogger*, and *Pac-Man*, they were new concepts at the time and it took a good few tries to get the general gist of their gameplay. But that was part of the fun – figuring out how to play each game and deciding whether or not it was entertaining and worth piling coins into."

As the decade wore on, manufacturers produced increasingly elaborate cabinets. "While I enjoyed playing them, they were always a bit gimmicky to me," says Julian. "The showcase coin-ops always cost a lot more to play than 'regular' arcade games, and while they usually delivered a very exciting and intense experience, their gameplay was generally short. Unlike titles like *Defender*, *Asteroids*, and *Missile Command* that could be played for hours on a single credit, games like

INCREDIBLE INNOVATIONS

THE TECHNOLOGICAL DEVELOPMENTS THAT KEPT PLAYERS READY FOR THE NEXT OF PACE
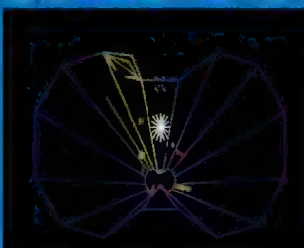
COLOUR VECTOR GRAPHICS

» Games with raster displays had gone colour some years ago, but *Tempest* proved that you needn't forego beautiful, crisp lines just for a splash of colour. Games like *Star Wars* would cement the technology in the hearts of gamers everywhere, but alas, it wasn't long for the world and was abandoned before the decade's end.

LASERDISC GAMES

» By using discs that stored high quality video, arcade games could achieve unprecedented graphical detail – albeit at the expense of interactivity. Sega's *Astron Belt* introduced the technology, but *Dragon's Lair* beat it to market and kickstarted the craze properly, thanks in large part to Don Bluth's animation.

» [Arcade] While multiplayer gaming and the arcades are inextricably intertwined, the Eighties saw more games going beyond two players.

» [Arcade] Late Eighties games like *Golden Axe* show the pace of progress in the arcades pretty well.

After Burner, Out Run, and Space Harrier all had distinct endings that limited your play time." But plenty of classics still needed just a stick and buttons, from *Wonder Boy* and *Strider* to *Rolling Thunder*, *Contra* and *The New Zealand Story*.

But it's the blasters that top Julian's personal high score table. "*Robotron: 2084* is simply the sheer essence of a shooter distilled down into a frenzied single-screen experience. The rate that you mow down the robotic enemies is incredibly satisfying, and

I love the various behaviours of the different denizens – they really test your skills and reflexes to their limits," says the arcade veteran. "And then there's *Defender* – which I think is perhaps the greatest shooter ever made," he continues. "Whether you're thrusting along at full speed mowing down swarms of Landers, avoiding the attentions of a pursuing Baiter, or trying to fly through a hail of ordnance to pick up a falling astronaut, *Defender* offers a simply sensational shoot-'em-up experience."

PREACHING OF
THE CONVERTED

MINDWARE'S **MIKITO ICHIKAWA** TALKS ABOUT THE ART OF BRINGING ARCADE GAMES TO THE HOME

We understand that arcade games inspired you to begin developing games. Could you please tell us about that?
The first action game I played was *Space Mouse* for the PC-8001 at a PC shop. At the time, I was interested in computers because I wanted to make them do aerodynamic calculations. My first personal computer was a dead copy board of MZ-80. In the midst of all this, Namco's *Dig Dug* started to catch on and I went to see it. I'd played *Space Invaders* and *Asteroids* before that, but the impact of *Dig Dug* was immense, and I've been making games ever since.

Were there any conversions of arcade games that you thought were impressive in the Eighties?
There are a lot of them. What I was particularly impressed with was *Mappy* for the PC-6001 MKII. The logic of the enemy was firmly based on the arcade version, the pattern of the map was made as similar as possible. There were many conversions that did not have bonus stages such as NES and MSX, but the bonus stage was also reproduced, and it was a conversion with a very high degree of completion.

When converting games like *Slap Fight*, how did your process differ from today?
Nowadays, it's an emulation port. On the other hand, when it comes to *Slap Fight*, the Mega Drive is significantly

less capable than the original hardware, so it couldn't be developed in the same way. The source code was very helpful in porting *Slap Fight* with detailed character movement logic and lots of hidden features. However, the source code was handed to me on a printed piece of paper, so I had to go through everything, which was a lot of work. [...] As for the music, I was provided with a handwritten copy. Since it was a score, not data, it was only a reference and it took a lot of time to reproduce every detail.

You have now brought a number of classic arcade games to modern platforms. Why do you think players are still interested in playing arcade games from the Eighties?
Recently, the development budgets of the major publishers' games have skyrocketed. This makes the graphics and sound gorgeous, but since players know that new games have more gorgeous graphics and sound than the old one, there aren't that many surprises. I was shocked when *Tetris* appeared in the late Eighties and surprised when *Minecraft* appeared in the Noughties. I think there are a lot of surprises like this in Eighties games. Whenever I release a ported version of an old game, I always make a version that goes beyond the arrangement and can be called the 'Ultimate Evolved Version', and I do this because I want you to experience the surprises you experienced in the Eighties.

FILLED POLYGONS
» Dave Theurer's *I, Robot* introduced the technology that would ultimately come to dominate video game graphics in 1984, but it didn't do particularly well for Atari. 3D graphics technology started to become more popular towards the end of the decade, thanks to racing games like *Winning Run* and *Hard Drivin'*.

MOTION CABINETS
» The trend for full-body experiences began with *Hang-On*, which required players to steer a replica bike, but some new games turned into miniature theme park rides. From the hydraulic seats of *Space Harrier* and *Out Run* to the spinning base of *WEC Le Mans*, plenty of games implemented physical experiences.

LINKED MULTIPLAYER
» Playing a game with a friend is fun, so playing with more friends is surely more fun, right? That was Namco's reasoning when introducing *Final Lap*, a boundary-pushing cabinet that could be linked for up to eight players to enjoy. These days, it's a feature that no respectable arcade racer can go without.

CREATING CHARACTER

THE EIGHTIES SAW AN EXPLOSION IN RECOGNISABLE VIDEOGAME CHARACTERS, INSPIRED BY THE CARTOON CHARACTERS BELOVED BY KIDS WORLDWIDE. WE LOOK BACK AT THE WHY GAMING HEROES BECAME SO IMPORTANT

When you look at the growth of gaming during the Eighties, so much of it is driven by the popular characters of the era. While abstract games were still capable of becoming huge hits – just look at *Tetris* – companies that found their star character could rake in tens of thousands of sales, maybe even millions. If that happened, the chances were they would prosper for a long time to come. When Hollywood eventually came knocking in the Nineties, the first projects to make it to the screen featured characters conceived in the Eighties – Mario, Billy and Jimmy Lee of *Double Dragon*, and *Street Fighter*'s Ryu.

But why were characters so important, and what was it about the Eighties that allowed them to prosper? "People connect better with personalities than machines or abstract objects. Even though the graphics were basic back in the Eighties, we all had imaginations that filled in the details," says Philip Oliver, co-creator of the *Dizzy* games. Until the very end of the Seventies, graphics technology didn't really offer sufficient levels of detail and animation to convey character. "It was hard to relate, or get excited about the cannon in *Space Invaders*, or a low resolution, top-down car or tank," Philip

continues. "Then Pac-Man, Jump Man (later called Mario), Smurfs (one of the first character games we saw on an Atari 2600 – which amazed us) came along and even though the game itself didn't show the character in much detail, the box art, and sometimes the loading screen helped fill in the gaps."

Of course, creating a memorable character is far from a simple task. "For a character to become memorable it needs to be unique and a bit quirky! Dizzy achieved this by being a large happy face on legs… which everyone decided was an egg," says Philip. "His energetic movement and facial animations (tough to do on characters in low resolution games) gave him a fun personality that captured player imaginations – *eggsactly* as we hoped
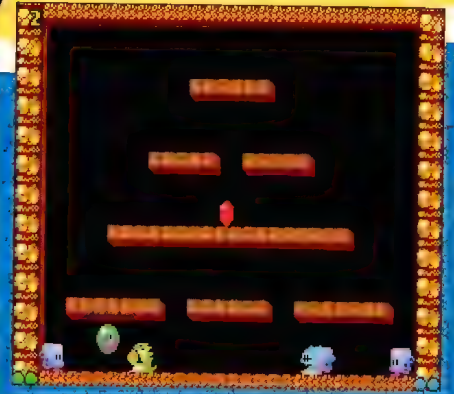
» [Arcade] Plenty of Eighties heroes gained fame across genres – Bub and Bob hit the puzzle scene later on

for!" Once the character is set, the game designed around them comes with its own considerations. "You think about the game as a world, a place in which your character needs to live and move around. So many decisions now revolve around this, his appearance dictates the art style, the gameplay mechanics revolve around what he looks like he's capable of doing," Philip explains. "The story and missions need to put him, or her, central to the events."

With gaming seen as a hobby for young people at the time, many of the characters back then resembled cartoon characters in their design. "Pac-Man was the first videogame character as far as we're concerned, but other popular characters for us included Frogger, Q*Bert, Mr Do (a clown), Chucky Egg, Manic Miner, Frak! and Thing On A Spring." On the consoles, a different set of stars was emerging from the Japanese scene – Mega Man, Link, Samus Aran, Alex Kidd, Bonk and arguably the most popular gaming character, Mario. "We knew him as Jump Man from Donkey Kong (or
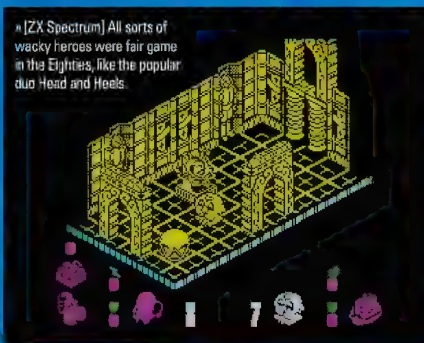
» [ZX Spectrum] All sorts of wacky heroes were fair game in the Eighties, like the popular duo Head and Heels

HALL OF HEROES

A SELECTION OF THE MOST RECOGNISABLE GAMING HEROES OF THE EIGHTIES – AND WHAT THEY'RE UP TO NOW
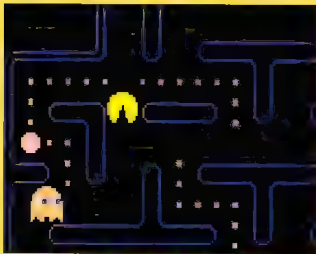
PAC-MAN • 1980

▶ This hungry yellow chap was an arcade phenomenon in the Eighties, despite being designed so that you couldn't discern his emotions. It didn't matter – he ended up starring in many sequels and a cartoon series as well as adorning all sorts of merchandise, both in the Eighties and far, far beyond.
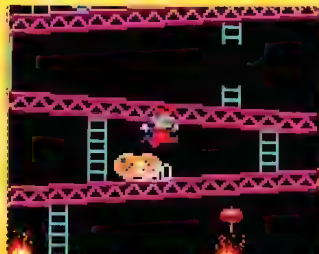
MARIO • 1981

▶ While *Donkey Kong* was named after its starring villain, the unassuming plumber that battled him soon became a bigger star thanks to a series of incredible platform games. As the most recognised of Nintendo's many famous characters, he'll surely be around for decades to come, too.
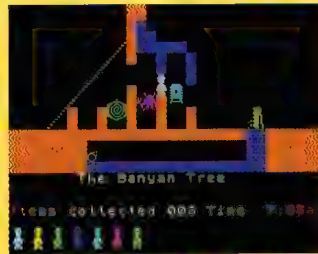
MINER WILLY • 1983

▶ What type of character could be more emblematic of Eighties Britain than a miner? His third proper outing never saw the light of day thanks to creator Matthew Smith's difficulties in finishing the game, curtailing his career, but we'll always have the excellent *Manic Miner* and *Jet Set Willy*.

SABRE MAN • 1984

▶ Ultimate's hero was one of the few characters to undergo development between games – as well as changing gameplay styles between *Sabre Wulf*, *Underwurlde* and *Knight Lore*, he actually become a werewolf at one point. *Sabre Wulf* saw a 2004 remake, but he's been inactive since.

» [Arcade] Billy and Jimmy Lee prove that siblings were popular choices whenever a second player got into the mix.

Killer Gorilla on BBC) as we didn't see *Super Mario Bros* until late 1989 when we went to America," says Philip, providing a reminder of how gaming scenes were so much more regionally distinct at the time.

Of course, as we grew up our tastes shifted and big hits today tend to star realistic human characters. "Many games these days are trying to appeal to 15-plus year olds who generally prefer more mature characters and realistic environments," says Philip, explaining the decline of the Eighties-style cartoon hero. "But new characters are still being introduced, targeted at kids, take for example the Angry Birds which even lead to two movies. Then there's Steve and Alex from *Minecraft*, although since their names are less unique they are less memorable. More recently you have Goose, from the *Untitled Goose Game* – they really needed to work on their marketing names!" ▶

Some characters had relatively low-key debuts – Solid Snake only became a true superstar in the Nineties

DAVID CRANE TALKS ABOUT THE CREATION OF ONE OF GAMING'S FIRST HUMAN HEROES PITFALL HARRY

What made you create Pitfall Harry?
Pitfall! came about primarily from my desire to make a game with a human main character. At the time, most game characters were inanimate objects – tanks, space ships, etc. I animated a character and placed him in a jungle setting, and it worked very well.

Do you think giving your character a name and personality helped players bond with him?
Pitfall! was one of the first games that you could control a human-like character in a videogame as your avatar. As my alter ego it was natural to name him. I made him do all the fun things that I would have enjoyed – from swinging on vines to hunting for treasure. Frankly he didn't exactly have a personality, but the game player could identify with him as they risked the hazards of the game together. If a player bonded with him, it would likely have been because you were risking your lives together.

Why do you think so many videogame characters started appearing during the Eighties?
Videogame technology went through a rapid growth in the Eighties, allowing more detailed animations to be created. Controlling an on-screen avatar was nearly enjoyable (whether it was a jungle adventurer or a plumber), so it was only natural to use that newfound animation capability to make increasingly complex characters. I think that led to the ability to imbue characters with personality as well.

Did you have much involvement with Harry's appearance in *Saturday Supercade*?
I offered to be Pitfall Harry's voice, trying out a sort of a Dudley Do-Right impersonation. But I was

What things should you keep in consideration as a developer when creating a videogame character?
Character development is an important aspect of mainstream media, but it wasn't much of a factor in the Eighties. We first figured out how a character would act in the context of a game, then figured out his look, given the available technology. What authors refer to as 'character development' was a distant third. These days, on the other hand, with videogames rivalling films in complexity and interaction, game characters deserve every bit as much to work as characters in other media.

Why do you think Pitfall Harry remains so loved by gamers?
Pitfall! was a huge success during the rise of videogames. Virtually every game-player at the time either owned the game or played it at a friend's house. It was also visually stunning for its day, so everybody who played it had fond memories (even if some found it hard to play). That was many people's golden age of gaming, and *Pitfall!* was very much in the game-players' minds at the time. I suppose Pitfall Harry benefits to this day from the nostalgic glow of those good old days.

[Atari 2600] David says while Pitfall Harry didn't have a personality, gamers bonded with him as you were taking on deadly situations together

URIDIUM BY STEPHEN CROW ZX SPECTRUM 1986

"I loved the ship. Coming out of the screen at an angle, it looked like a solid object I could reach out and pick up off the screen. Simple but effective rendering at the time too."


WONDER BOY • 1986

▶ This hero has had a variety of odd names, much like his own series, and turned from an axe-chucking skateboarder into a shapeshifting swordsman. It seemed like his glory years were long behind him until recently, when a surge of new activity gave him a welcome career renaissance.

ALEX KIDD • 1986

▶ Sega's hero was a little kid with a huge fist and a love of rock-paper-scissors. Though he starred in some cracking games, ropey outings like *The Enchanted Castle* and *Hi-Tech World* meant he never gained a reputation for consistency before he was sidelined by a blue show-off in the Nineties.
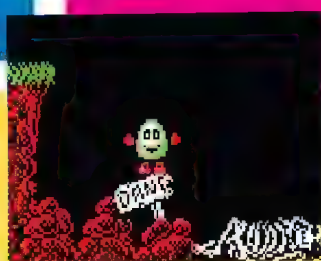
DIZZY • 1987

▶ The prince of the Yolkfolk was a smash hit on the home computer scene, doing the business for Codemasters across a series of arcade adventures. He'd later star in plenty of spin-offs and even make a move to consoles, but his career stalled in the mid-Nineties and he never moved to 3D.

MEGA MAN • 1987

▶ Capcom's most prolific character has starred in an enormous number of games, selling over 36 million copies, and enjoys great popularity amongst nostalgic NES owners. He's slowed down in recent years, but his retro-style outings since 2008 have been consistently popular with players.

BUDGET BRILLIANCE

WHILE GAMES WERE FAR CHEAPER IN THE EIGHTIES COMPARED TO TODAY, NOT EVERYONE HAD A SPARE TENNER TO SPLASH OUT ON THE LATEST TENT-POLE RELEASE. FORTUNATELY, BUDGET GAMES AND COMPILATIONS WERE A GREAT WAY TO ENSURE YOUR HARD-EARNED POCKET MONEY STRETCHED AS FAR AS POSSIBLE

» Dizzy is arguably one of the most successful budget franchises of all time and was a big money spinner for Codemasters

Even if you make adjustments for inflation, games were still cheaper to buy during the mid-Eighties than they are today. £9.99 seemed to be the sweet spot for many publishers releasing games during this period and not everyone could justify them, meaning those more coveted releases would typically end up going on Christmas and birthday lists. Fortunately, there were plenty of ways to get your hands on cheap games without resorting to type-in listings, piracy or mail order clubs. Those alternative options were budget games and compilations, and our pockets will be forever grateful for them. "For me it was all about the cost," explains Simon Plumbe, the founder of Facebook's Mastertronic Collectors Group. "I didn't get a lot of pocket money growing up so it meant that I could still get a new game every week."

When you think of budget games today, Codemasters and Mastertronic are typically the first you think of. Both companies did exceptionally well at selling games at lower price points, and Codemasters is still going strong today – although its founders, Richard and David Darling, have long since left. While lower priced games certainly existed before Mastertronic appeared, it arguably helped shape what would become a very profitable part of the industry in the Eighties and early Nineties. Mastertronic first started selling £1.99 games in April 1984 and shifted over 40,000 units after a week on sale. A combination of enticing artwork, recognisable branding and targeting various home systems worked wonders for the company and led to countless other publishers following suit. "Atlantis really helped keep the VIC-20 going when others moved away from it, so I bought a lot of their games," continues Simon.

» You were unlikely to be disappointed if you received an Ocean compilation like The Magnificent 7.

"And I can't forget Firebird and Codemasters for delivering plenty of top-quality titles as well."

Plenty of other publishers jumped on board the budget train and the cannier ones even set up specific labels like The Hit Squad (Ocean Software) and Kixx (US Gold) as a way of giving older games a second bite of the cherry. Simon remembers these re-releases fondly. "We might complain about game prices now but as a kid in the Eighties even £10 for a new game was a lot so re-releases were fantastic," he explains. "There was no way we could afford everything, so getting a slightly older game cheap was great." Low prices also seemed to help stave off piracy too, with Simon recalling it being less prevalent. "It did happen sadly, but it didn't seem to stop kids from buying them, either," he recalls. "The price still made them appealing enough and I remember that I could

» Compilations were a great way of stretching your pennies when money was tight.

» Companies like Mastertronic used bright, distinctive branding to instantly stand out on shelves.

» Simon Plumbe loved collecting Mastertronic games so much he set up a popular collector's group.
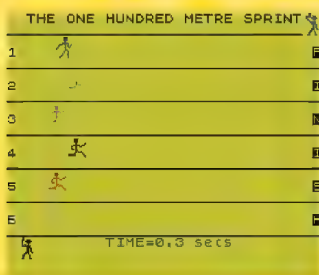
» [C64] Titles like *Knight Tyme* were a big success for Mastertronic and proved a small outlay didn't mean a weak game.
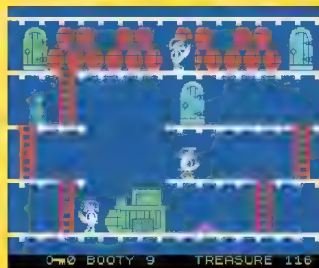

» [C64] Lower prices meant publishers could take risks. It's very unlikely *Pub Trivia* would have survived with a £10 price tag, for example.

» [C64] After releasing games for Mastertronic, the Darling brothers set up Codemasters and published *BMX Simulator*.

» [ZX Spectrum] While *Cassette 50* offered 50 games for £9.99 the actual selection wasn't the best.

» [ZX Spectrum] Titles like *Booty* were a great success for Telecomsoft's Firebird label.

always find large piles of budget games at all my friends' homes!"

Of course, budget games weren't the only way to enjoy gaming on the cheap in the Eighties; another popular way was to save your money and put it towards the many compilations that publishers released. Sure, some of the earlier examples like Cascade's *Cassette 50* were filled with pretty terrible games, but as the market matured, more and more publishers put larger effort into them, enticing gamers with a selection of hit games that they might not have otherwise been able to afford. Both budget publishers and full-price publishers saw the strength of being able to resell you games, leading to a range of compilations like *They Sold A Million*, *The Magnificent Seven*, *The Gold Collection* and the many different collections created by Beau Jolly to name just a few.

As great as these compilations proved to be for us, they could certainly provide problems behind the scenes. Simon Berry was a technician at

Speedlock and would add protection to various games and subsequently compilations. "Since the compilation typically came out a couple of years after the original, occasionally there were compatibility issues across the ever-increasing variety of Spectrum hardware (Amstrad was pretty stable) to think about, although these tended to get identified during QA," he reveals. "Disks were particularly expensive. So then it became the challenge of how many games could fit on one side of a disk. I invented a novel disk format, and used data compression with this to jam as much as I knew how on to disks."

Those endeavours were tricky but worth it, as they created essential revenue streams for publishers and became a valid way of acquiring a great library of games without spending an absolute fortune in the process. Budget games and compilations became an important aspect of the games industry during this period, and it's somewhat sad that they're nowhere near as prevalent today.

MASTERING THE BUDGET

MASTERTRONIC'S PR
ALISON BEASLEY

Why were companies like Mastertronic so successful?
Mastertronic were smart in selling... in bundles of titles, together with the notion of a rack or stand so that retailers could make an easy choice of a pack that came with a number of games and an easy way to display them. Alongside the major retailer chains (eg Boots, WHSmith, Woolworths etc) they were very smart about selling into petrol stations, corner shops and a bunch of other outlets where people would make impulse purchases. The founders had a lot of retail experience, in selling videos (particularly understood production, distribution and retail. They had a network of sales reps who covered various areas and territories who played a vital role.

Did the low price point help against piracy?
Not much. There were big issues with piracy at markets and retail all over Europe. There were busts and seizures but it was a constant menace. Our team of reps were constantly on the lookout and didn't hesitate to take pirated stock.

Mastertronic had a lot of sub-labels, was it important to keep the brand fresh?
Yes, they were always looking at ways to keep the range exciting for retailers and consumers. The MAD range, priced at £2.99 also meant they had a better margin and a bigger budget to put into development. Development skills and consumer expectations were moving quickly, so we were keen to keep pace and stay ahead.

How important were review scores?
A good score was stickered onto the game's packaging and featured in ads which was definitely useful for consumers. For games sat alongside higher priced games in major outlets, so anything that made them stand out and look like a better choice was always helpful. Reviews became increasingly important to the point where distributors demanded to know what kind of review scores we expected or had gained before they'd place an order.

THE HIT SQUAD

PAUL HUGHES ON ASSEMBLING
OCEAN'S COMPILATIONS

Why were compilations important to companies like Ocean?
I guess, put simply: money! The return on investment was pretty high. For the consumer it was great value for money, for the publisher it was reasonably simple to put together for little outlay.

What did working on a compilation entail?
This wildly varied depending on where the titles originated from and the media they appeared on. If the titles were internal, chances are I'd already mastered them and so had either the raw unprotected code, or the master maker already to hand. It generally started though with Lorraine (the assistant software manager) coming over with the names of the games that were to appear on the title and from there I'd have to work things such as the optimal order (which sides) to put the games on in order to keep the tape length as short as possible (less tape equalled less cost). The same applied to the disk versions.

Were there difficulties creating them?
With externally licensed titles, if I was lucky I'd get a master maker to just hand off to the duplicators. In some cases, I'd get a disk of raw code to wrap up with a fast loader and the various protection trickery. In a surprising amount of cases, I just got a cassette of the game and had to break into the protection, inject our own load routines in and then remaster the title again.

Did you license games from other companies?
Oh yes, there were many deals done with Activision over the years – games such as *Ghostbusters 2*, *The Last Ninja*, *Karnov*, *Predator*, *Rampage*, *IK+* all featured on Ocean compilations.

If a developer's game appeared on a compilation after it had already been released were they paid again?
If it was a title developed internally, or an Ocean licensed conversion done out of house, generally not. Internal developers were salaried and paid discretionary bonuses, so there were no royalties at the time. External developers generally got a one-time fee so weren't due anything for compilations.

What's the best compilation you worked on and why?
Gosh! There were a lot of them! *The Magnificent Seven* was a pretty good one from what I recall, especially because it contained eight titles! All of the titles were developed by Ocean/Imagine so I'd imagine it was a very tidy little earner for them.

TREMENDOUS TUNES

Though the games of the Seventies certainly had their distinctive sounds, from the bassy boom of *Asteroids'* explosions to the relentless march of the *Space Invaders*, gaming audio really came of age in the Eighties. One man noted for his love of game music from this era is Chris Abbott, owner of C64Audio.com. While he's most associated with the SID, his love of game music actually predates his ownership of Commodore's most popular machine. "The Atari 400 was my first machine, so I have a really soft spot for POKEY, which was a chip they put a lot of thought into. Hearing *Preppie!* and *Shamus* for the first time on the winter's night I got my first computer was life-changing." Once he got the C64, he discovered the work of a range of talented composers, including Rob Hubbard, Martin Galway, Ben Daglish, Maniacs Of Noise and Tim Follin. While those composers made their names here, in Japan

the likes of Koji Kondo, Yuzo Koshiro, Hiroshi Kawaguchi, Shinji Hosoe and Nobuo Uematsu began their careers, creating memorable tunes in the arcades and on home consoles.

Of course, while the musicians were names you came to know, their tools were just as important and the decade saw rapid technological development. "Going from the VIC-20's synth chip to the wonder of the C64's SID was a huge leap, but going from 'essentially beepers' to Atari's four-voice POKEY chip was almost as big a jump. The guys behind the SID went on to Ensoniq to do amazing stuff with wavetables that seemed to go nowhere commercially. They were years ahead of their time." FM synthesis became popular in arcades from the mid-Eighties and eventually filtered into the home in systems like the Amiga and Mega Drive. By the end of the Eighties

it was even possible to experience games with CD audio, if you were lucky enough to own a PC Engine with the appropriate add-on. Freed from restrictions, composers were able to reimagine the chiptunes of games like *Ys* and *Wonder Boy III: Monster Lair*.

Today, Eighties game music is reimagined in a similar way by composers in projects like OCRemix and Chris' C64Audio.com. When asked what keeps people interested in his own project, Chris notes a few factors. "Partly because they're full of talented people including original composers like Rob Hubbard, and because they feel part of that community: it's a bit of a family," he explains. "Partly because people like 'the same but different' and to have tunes they love have more love poured in. And partly because the projects are so ambitious, technically and creatively: who else would risk a multi-decade project to get a whole symphonic orchestra to do C64 tunes? And we deliver. Eventually!"

» By the end of the Eighties, Japanese gamers could buy official CD releases of their favourite soundtracks

» [Arcade] Developments like FM synthesis chips were initially restricted to expensive arcade hardware, before going mainstream


» [C64] Some games shared loading themes, like the excellent one accompanying *Rastan* and other Imagine Software games.

MAGNIFICENT MAGAZINES

While plenty of column inches had been dedicated to the success of Atari and *Space Invaders* during the Seventies, the Eighties marked the first time that we got publications wholly dedicated to electronic games. *Computer & Video Games* opened the floodgates in the UK with its debut
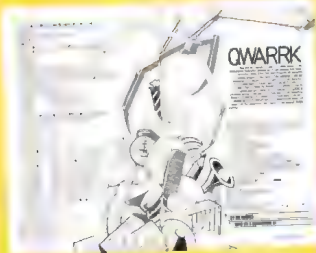
November 1981 issue, and by the mid-Eighties we had a formidable range of magazines delivering all the information gamers craved.

One reader who remembers those days well is Vinny Mainolfi, who was introduced to games magazines through issues of *C&VG* and *Personal Computer World* that came with his first computer. For him, the appeal of the magazines was one very distinctly tied to the Eighties. "Both magazines were a great source for game listings that I could type into my good old TRS-80 – bless it. I was more excited about the game listings than the actual game reviews." With the early home computer market being so competitive, those multiformat magazines were key to begin with. But as market leaders emerged, so too did single-format magazines. "I treated myself to a brand-new

Commodore 64 and totally fell in love with *Zzap!64* – mainly the Julian Rignall years. Seeing the game reviews such as *Way Of The Exploding Fist* and *Ghosts 'N Goblins* just blew me away. It was a different style of magazine that really fitted the times and vibes that we were all experiencing during our teenage years – the hair; the clothes; the music…"

While the format of news, reviews, tips and screenshots would define gaming coverage for years to come, the graphical limitations of the era meant that creativity was needed for memorable covers, with artists like Oli Frey providing memorable illustrations. "Many of the early covers of *Zzap!64* hold a specific memory for me: when I purchased them, what the weather was like at the time; how happy/unhappy I was; what music I was listening to,"

says Vinny. "Those covers were *that* powerful that they evoke so much feeling and memories." Also hand-drawn were the portraits of the magazines' writers, who felt like people you could connect to. "It's what we craved: our very own rock stars of the gaming industry; and it's something we needed to help boost our confidence about playing computer games – we were no longer spotty, greasy-haired, BO-stinking geeky teenagers," says Vinny. "The personalities helped to raise the profile of the gaming industry as a whole."

Fondness for the magazines of the time led Vinny to create *FREEZE64*, a dedicated Commodore 64 magazine. "Many of our readers have said that receiving and reading *FREEZE64* is like having *Zzap!64* again. This is probably the highest compliment I could ever receive," he says. "But my intention is to avoid copying any style that *Zzap!64* had back in the day. What I do try and mimic is the feeling and anticipation of waiting for the next issue, and then receiving it. That excitement and build-up is one of my favourite experiences of magazines from back in the Eighties."

MELODIES

FIVE CLASSIC TUNES THAT BRING THE NOSTALGIA FLOODING BACK
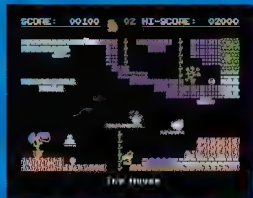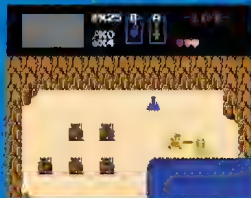
MONTY ON THE RUN

TUNE
Main Theme

COMPOSER
Rob Hubbard

▶ There are any number of games you could have chosen to represent Rob Hubbard's work, but we particularly like the frenzied accompaniment to Monty Mole's third outing. The lengthy piece incorporates a number of amazing sections, including a memorable 'guitar' solo in the middle.

THE LEGEND OF ZELDA

TUNE
Overworld Theme

COMPOSER
Koji Kondo

▶ This jaunty little theme definitely feels like the right fit for a game that plunges you straight into the deep end of an adventure, with nothing but some weaponry and your wits to protect you. Though the tune lasts just 40 seconds before looping, it remains integral to the series' themes to this day.

OUT RUN

TUNE
Magical Sound Shower

COMPOSER
Hiroshi Kawaguchi

▶ At a time when music was still a luxury in many games, Kawaguchi's access to arcade hardware allowed him to do pioneering work with FM synthesis and even add a choice of soundtracks. When we daydream of sunny shores lined with palm trees, this is our musical accompaniment.

DRACONUS

TUNE
Title theme

COMPOSER
Adam Gilmore

▶ Time and talent can do great things, and by the late Eighties Adam Gilmore had really learned to wrestle the best from the Atari 8-bit's POKEY chip. The title theme for Draconus really made the old hardware sing, and set the tone for the game – which it had to, since there was no in-game music.

XENON 2: MEGABLAST

TUNE
Main Theme

COMPOSER
Bomb The Bass/David Whittaker

▶ Adapting the track Megablast (Hip Hop On Precinct 13) was a stroke of genius for the always trendy Bitmap Brothers. As well as being one of the earliest signs of the licensed music boom that would happen in the Nineties, it was something that demonstrated the power of the 16-bit machines.

LOADING SCREENS

STARSTRIKE II BY GRUM
ZX SPECTRUM, 1986
"A highly detailed and expertly rendered digital version of the game's cover art. The amount of detail in it used to give me a headache, and I wished I could draw something as good as this on my own Spectrum."

READING

THE MAGAZINES THAT DISTINGUISHED THEMSELVES FROM THE PACK

COMPUTER & VIDEO GAMES

LAUNCH YEAR
1981

▶ The first name in UK videogames magazines didn't just succeed by being the first magazine to market. As the decade went on the magazine kept itself relevant by adapting its format, with a bigger focus on reviews as the years went on, and eventually creating demand for consoles with import coverage.

CRASH

LAUNCH YEAR
1984

▶ Newsfield's first big success in games magazines was driven by its youthful staff, who shared the readership's enthusiasm for the games they were covering. The magazine's team was keen to use real screenshots and positioned it as a buyer's guide, focusing on reviews and tips over type-ins.

ZZAP!64

LAUNCH YEAR
1985

▶ Realising that Commodore gamers would probably enjoy a magazine with a similar approach to Crash, Newsfield launched this sister title. Writers such as Gary Penn and Julian Rignall soon became familiar names to the magazine's readers, and regularly beat them in gaming challenges.

AMSTRAD ACTION

LAUNCH YEAR
1985

▶ Yes, we're choosing a Future title here – but let's be honest, there's a reason that it ran for ages. If you had Alan Sugar's machine, this was the right title to go for, especially when the Christmas issue included a cover tape. Later on, those tapes would became staple of the computer magazine market.

ACE

LAUNCH YEAR
1987

▶ This multiformat magazine was trying to be a bit different from the competition, with a broader outlook on computer entertainment and a tone that aimed at an older teen audience. For some reason, it scored games out of 1,000 rather than the more common scales, which we always liked.

LICENCE TO THRILL

Licences really began to come of age in the Eighties and publishers would fight over themselves to earn the rights to convert the most popular arcade games, films and TV shows. One company that excelled at this was Ocean Software. Many developers would base their games on arcade classics including Jon Ritman, Geoff Crammond and Jeff Minter, and Ocean was no exception. "Before we became 'Ocean', we were 'Spectrum Games' and doing rip-offs of classic arcade titles," explains Gary Bracey who worked at Ocean as its software director. "Then the opportunity to license the official *Hunchback* coin-op was presented to Jon Woods and that was the start (a little before I joined the company). That was the first licensed Ocean game, and we soon realised that a recognisable brand was a great marketing hook so Jon focused his early energies into the acquisition of such licences."

One of the early benefits of acquiring arcade games was that the cost of the licence was relatively cheap. It led to a number of conversions appearing under both the Ocean label and its acquired Imagine Software label. "Jon stayed very much at the forefront of that, having established great relationships with the likes of Konami and Taito in Japan," Gary continues. "In the early days, we were given carte blanche to adapt whichever of their games we wanted, but not long after the massive success of the NES, those companies realised they could make much more money by doing it themselves and so it became a lot more challenging to get the high-profile coin-op rights."

Interestingly, while Ocean had success with the likes of *Hunchback* its early TV and film adaptations didn't find the same critical success and we're keen to know why. "Errr... because they were shit?" says Gary. "The problem was that in the early days, Ocean had a very small in-house dev team and had to 'farm out' much of its development to external freelancers," he continues. "There was little-to-no oversight of these developments and so those external studios weren't motivated to do much. This resulted in very poor quality products... if they even materialised at all. This was one of the reasons I was brought in – to basically oversee and manage the development (both in-house and external), because there was no one doing it!"

Gary's introduction saw a rise in overall quality across the publisher's output, and while Ocean still produced some stinkers during his tenure (the C64 version of *Chase HQ* and *Miami Vice* immediately spring to mind) there's no denying it released some of the best licences of the time. Of course, it wasn't just Ocean that saw the merits of licensing coin-ops and films, and plenty of

» Ocean's *Platoon* and *RoboCop* featured different gameplay mechanics to suit specific scenes from the movie

A LICENCE TO PRINT CASH
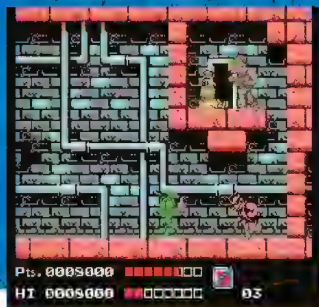### GARY BRACEY'S STEPS TO 80S LICENSING SUCCESS

1 "AIM FOR A CHRISTMAS RELEASE, WHICH WAS THE PEAK SELLING PERIOD OF THE YEAR"

2 "SELECT A HIGH-PROFILE LICENCE. ONE THAT'S IDEALLY RECOGNISED BY 99% OF PEOPLE"

3 "MAKE SURE YOUR CHOSEN LICENCE IS A VERY CURRENT ONE. THIS IS IMPORTANT FOR OBVIOUS REASONS"

» [NES] The *Teenage Mutant Ninja Turtles* NES pack achieve the same success for the NES that Ocean's *Batman* managed for the Amiga.

» [C64] Audiogenic's *Emlyn Hughes International Soccer* married a popular celebrity to a mechanically great footbal game.

other developers were eager for a slice of the pie. Activision tackled various movies and coin-ops, including many by Sega. If you enjoyed Capcom games, odds are a home version would be published by US Gold, while the likes of Alternative Software and Hi-Tech Software specialised in TV and cartoon licences. Elite dabbled in both ponds, delivering arcade conversions of *Commando* and *Paperboy* and tackling things as diverse as *Frank Bruno's Boxing* and *Mike Read's Pop Quiz*. Firebird produced the likes of *Bubble Bobble*, *Flying Shark* and *Mr Heli*, while Mastertronic used a Skips tie-in to flog *Action Biker* on various 8-bit systems. Chances are, if something was popular on the TV, silver screen or even the lunch canteen, a publisher would find a way to capitalise on it.

One of the reasons licensed games were so popular with publishers in the first place was due to the low cost of acquiring them, although that did change. "They were really very cheap," admits Gary. "Movie companies just saw it as incremental revenue – not a big earner – and so we were able to acquire them relatively cheaply. *RoboCop* changed all that and was the game that made Hollywood realise that they could generate meaningful income from videogame licensing. That was the last 'cheap' licence – I think we paid around $20,000 for all digital rights – all computer platforms, all console platforms, coin-op and pinball!"

RoboCop is worth highlighting, as along with the earlier *Platoon*

it popularised an approach Ocean often took with its film licences, cleverly cutting the games into minigames to capture key elements of the movie. "Simon Butler was definitely a key contributor to the concept, as I think the first successful iteration was *Platoon*," Gary recalls, admitting it was a team effort. "I remember we needed to read the script and pick out key scenes which we thought might translate well interactively. *Platoon* had a number of such scenes but for different action scenarios and so the brainstorm session resulted in, 'Well, why don't we do all of them, rather than just picking one?' Of course, this meant significantly more development work (and therefore time) as we were making several games in one. But the formula was a good one and worked in such titles as *RoboCop* and *The Untouchables*."

That formula worked well for Ocean, and it continued to have success with numerous licences well into the late Nineties until it was eventually purchased by Infogrames in 1996. Games based on films and TV remained popular with gamers, only really slowing down with the current generation of systems. Nowadays, titles like the PS4's *Spider-Man* are the exception rather than the norm and news of a newly licensed game typically fill us with dread. In the Eighties however, licences were celebrated, mainly because they allowed us a way to enjoy our favourite movies, TV shows and arcade games on the home systems we loved. ✱

4
MOST IMPORTANTLY – THE FEATURED GAME HAS TO BE GREAT, SO IT NEEDS TO BE WELL-REVIEWED."

5
IF POSSIBLE, BUNDLE THE GAME WITH ONE OF THE HARDWARE FORMATS AS IT GETS MORE IN-STORE AND IN-PRESS PRESENCE"

STAR WARS: THE EMPIRE STRIKES BACK
YEAR
1982
PUBLISHER
Parker Brothers

▶ The *Star Wars* licence gets off to a great start with this frantic blaster from Parker Brothers. While it admittedly shares many elements with Eugene Jarvis' *Defender*, it manages to up the ante by tasking the player with taking out gargantuan AT-AT Walkers before they can destroy Echo Base's power generators.


GHOSTBUSTERS
YEAR
1984
PUBLISHER
Activision

▶ The huge success of the *Ghostbusters* movie meant a film tie-in was inevitable. Activision dutifully delivered and David Crane proved that busting ghosts yourself was just as fun as watching the critters meet their end on the silver screen. It's notable for having largely great ports and being one of the earliest film licences to seemingly appear on everything.

SPY VS SPY
YEAR
1984
PUBLISHER
First Star Software

▶ A good videogame licence is one that effortlessly manages to capture the spirit of its source material and the early *Spy Vs Spy* games manage that brilliantly. Best played with a friend as you each play one of the famous rival spies as you seek out items you need and lay fiendish traps for your opponent.
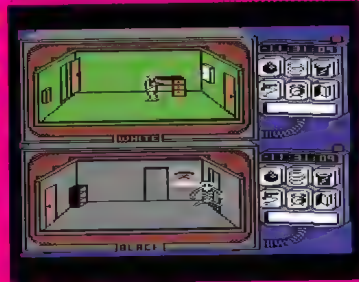
ROBOCOP
YEAR
1988
PUBLISHER
Ocean Software

▶ While *RoboCop* wasn't the first game to break down key elements of a film into neat bite-sized gaming chunks, it's certainly the one that perfected the formula. The core run-and-gun levels are interspaced by some excellent minigames that range from an identikit match-em-up to saving a woman from an assailant. Additionally, all the available weapons are great fun too.
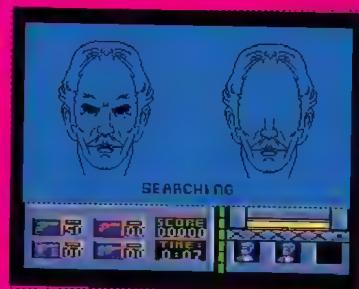
OPERATION WOLF
YEAR
1988
PUBLISHER
Ocean Software

▶ There are plenty of great arcade conversions to cover, but this wonderful effort from Ocean is one of our favourites because no home version was a duffer. The 16-bit offerings are extremely accurate to the arcade original but even the 8-bit ones are great fun. The fact Ocean could pack a powerful punch

Spy Vs Spy III: Arctic Antics

TOO MUCH OF A GOOD THING

Sequels can be difficult games to make. If a development studio makes an improved follow-up to a mediocre game, the applause it receives will be well-deserved. Perversely, it's entirely possible that you could make a better game than our theoretical improved sequel and still come in for criticism, because your game failed to add any substantial ideas to the formula of its predecessor. If you are blessed enough to achieve greatness, you should expect the curse of heightened expectations to follow – and really, when was the last time a developer had a successful game and then declined to make a sequel?

The first time I really experienced the concept of diminishing returns with sequels came with *Spy Vs Spy III: Arctic Antics*. When I received my Commodore 64 as a hand-me-down from my cousins, this game came with t, and between the various sports titles and arcade conversions it seemed like one of the most exciting games in the box of tapes I had just acquired. I was aware of the origina from its Master System conversion, and here was a sequel I'd never even heard of. As I struggled with an uncooperative tape deck, I wondered what surprises the game might hold when I could finally get it to load. But once it finally did, I discovered that the answer was 'not many'. Apart from the introduction of scrolling areas, there wasn't much to set the game apart from the original. The fundamental concept of setting traps and gathering items was still solid enough to ensure that I had plenty of fun with the game, but first impressions are hard to shake off and that initial feeling of disappointment has stuck with me.

Since then, I've seen plenty of series struggle to maintain player interest, but most of those took at least a few entries to reach their ideal form. But a rare few, like *Lemmings* and *Crazy Taxi*, manage to take a simple concept and absolutely nail it at the first attempt – and I guess you can count *Spy Vs Spy* among them. ✱
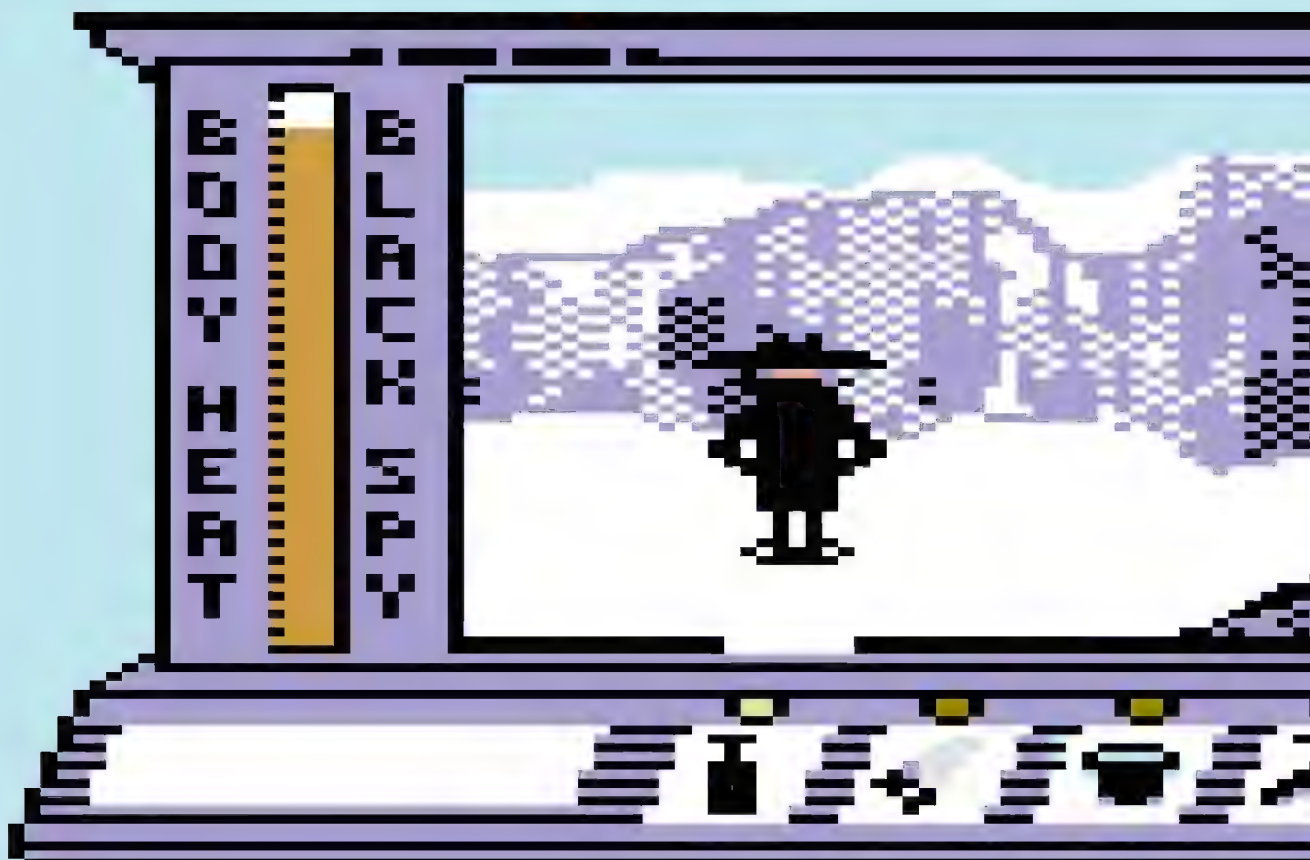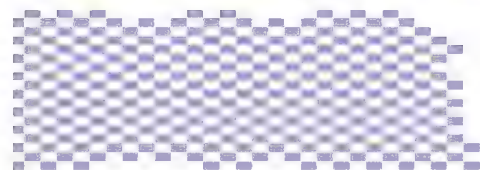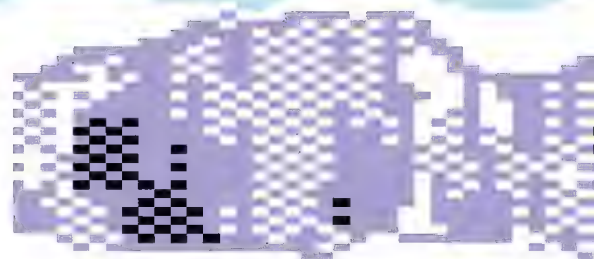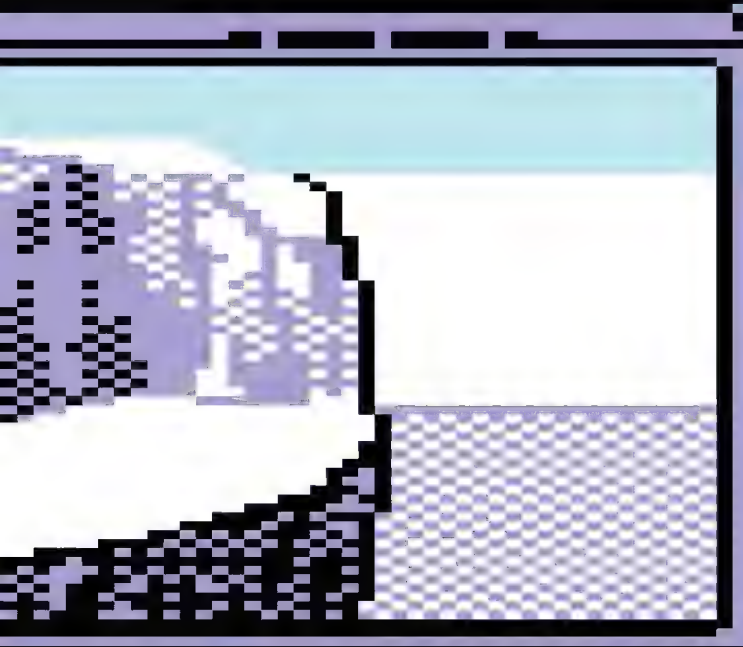
RETROREVIVAL

THE MAKING OF
FORMULA ONE

» [ZX Spectrum] It's race number three, and the Belgian GP.

```
Belgian Grand Prix (Race  3)
Dry Track - Air Temp. 59'F
Dry with clear skies

Circuit: Zolder
No.Laps: 70
         2.65 miles

1984 Winner: Alboreto
             Ferrari

Lap Record: 1984
            Arnoux
            Ferrari
            1m19.35

Press 'T' to print out screen
Press any other key to continue
```

Glamorous, exciting and dangerous, Formula One racing has no peer in the sporting world. Retro Gamer takes its place on the starting grid to find out more about one of the earliest — and best — management simulations of this high-speed sport

WORDS BY GRAEME MASON

t wasn't just precocious teenagers, banging out machine code in their bedrooms, who were inspired by the rise of the home computer in the early Eighties. The phenomenon of the commercially available microprocessor was gripping older generations, too. Two such men were Peter Wheelhouse and George Munday, childhood friends having met at Leyton County High School in the mid-Fifties. "Outside of school, we were avid pinball players," begins Peter, "and we went to local cafes and coffee shops to play on them most evenings." As Peter and George grew up and matured, such pursuits remained high on their agenda. "We loved board games, and one of our favourites was called *Careers*, but it wasn't an exclusive

obsession. We were both early players of the new electronic games machines in pubs and cafes, such as *Pong*, *Asteroids*, *Lunar Lander* and others." With the pair often travelling across London to play new machines, it was inevitable that they would take an interest in home computing. "We both got Sinclair Spectrums quite soon after their release," continues Peter. "When we visited each other at home, we'd often play games together, taking turns, with the other spectating and offering unwelcome advice and derision!" Two men in their late thirties enjoying an evening of *Manic Miner* and *Football Manager* may not sound too strange today, yet 35 years ago, with videogames roundly regarded as 'for kids', it was an uncommon activity for anyone over the age of 20 years old. "Quite soon, we agreed that a significant deficiency of all the games was that they were targeted at individual players – there was nothing that allowed multiple players to enjoy and compete together at the same time," notes Peter.

» [ZX Spectrum] On the starting grid, ready to go.

» [Amstrad CPC] *Formula One* also saw action on the Amstrad CPC.

"We'd often play games together, taking turns, with the other spectating and offering unwelcome advice and derision"
Peter Wheelhouse

The plan that emerged from this observation was for a Spectrum version of the board game *Careers*. With George now a partner in a law firm, the programming experience came from Peter as an IT project manager. "Although I had been a programmer and system designer in the late Sixties and early Seventies," he explains, "this had been on very large mainframes, and was already a decade in the past." As a result, coding began in BASIC and an admirably optimistic attempt at replicating the complex options of *Careers*, together with suitable graphical representation. "BASIC was far too slow for the graphical elements, so we decided to build modules in Z80 assembler, and split the game into separate elements: George's main focus was on the graphical elements and mine was on the inner workings of the game," says Peter. Communication was attempted via a Prestel, which was abandoned as too unwieldy and unreliable. In the end, Royal Mail came to the rescue, ferrying cassettes of code from one side of London to the other.

With Peter busy on a major work project, it was George Munday who took on the task of trying to find a software house for the game, bizarrely named £SD. "He met up with Clem Chambers, who had founded CRL, and Clem thought it may be a good addition to his portfolio," recalls Peter. "It was quite a thrill when we got the first commercial copies of our games and saw it advertised in magazines. Although we were old fogies approaching our 40th birthdays, we both thought it was a bit special that we had pulled it all together." The stimulus of publication compelled the two to discuss further ideas for a game, despite £SD selling a grand total of just 75 copies. "We both loved motor racing, so George discussed it with Clem who thought that a game based on the sport would do well." A similar pattern to their previous effort now played out, with Peter and George insistent that the game should be playable for both multiple and single players. It was also

key that it combine management, interactive and fun elements to produce something which the Spectrum games market had yet to see, and the approach to development took a similar path, except for a debatable upgrade in storage. "We used Microdrives for storage, which we would post to each other, and initially this felt like a major performance improvement over the cassette tapes," says Peter. "But as we built up the size of the code, you'd go and make a cup of coffee while it was being compiled and assembled into an executable program. It was a major frustration to get a new executable, start a test run and then hit a bug. I spent a lot of time desk-checking new source code, before building a new version in order to avoid this frustration." With the final *Formula One* source code clocking in on 30 separate Microdrives, it's fortunate George and Peter had the pleasure of research to fall back on.

"George had an uncle who was a senior member of Cosworth in the Eighties," says Peter, "and this enabled him to make contact with some F1 teams for research. He spoke to at least one manager as far as I recall, Ron Dennis [of McLaren]." More poignantly, the developers ▶

» [ZX Spectrum] Leading the pack in the Brazilian Grand Prix.

FORMULA ONE FACT FILE

From the starting grid to the chequered flag

■ In an attempt to counter piracy, Peter embedded some code into the loading screen that modified some of the main game data. Hackers contacted CRL, praising the technique and claiming it took them several hours to crack.

■ The image on the cassette inlay was inspired by the real life CRL-sponsored racing car.

■ Peter's main passion is motorbikes. After his Sierra Sapphire Cosworth was stolen for a third time in the early Nineties, he purchased a Honda 400 Supertwin. Six weeks later, George Munday bought a Ducati 600, and the pair regularly travelled to the Isle Of Man TT and other tours throughout Europe.

■ There's a unique code inserted into the game that appears if you win *Formula One* at the hardest difficulty, with CRL stumping up a prize for the first to find it. Having never managed it themselves, Peter and George were surprised when it was claimed within one month after the game's release.

■ An Amstrad port was converted by CRL's Richard Taylor.

■ While random to a certain degree, the player could influence the in-race events by choosing the right type of car and equipment for each course and conditions.

■ *Endurance* was developed after Peter had moved to an assignment in Sweden with the friends posting Microdrives to each other every Monday.

■ Towards the end of *Endurance's* development, George Munday loaded up his Ferrari with Spectrum kit and drove from Loughton, Essex, to Gothenburg, via Belgium, Holland, Germany and Denmark.

■ Peter and George continued to play games themselves, devolving to the logical platform of PC and Mac.

■ Inspired by gamers remembering *Formula One*, Peter created a web-based version of the game. It never progressed past a beta version of its single-player mode, but he is happy to share it with anyone wanting to take it further.

» [ZX Spectrum] At the end of each race, championship points are totted up.

» [ZX Spectrum] The best drivers do not come cheap.

found themselves at the scene of one of the most infamous Formula One races of all time. "We went to the Monaco GP [in 1984], partly justified as research, but mostly just because we wanted to," grins Peter. "It was the year the race was stopped, because of the torrential rain, which was causing a lot of crashes. We were watching from the slopes below the castle to the west of the circuit, and it was a nightmare in the rain and mud." The controversy did not stop there; with the positions counted from the race's penultimate lap, Alain Prost was given an advantage over his rivals, helping his team to win the championship by a slim margin later the same year. "Clem was also very much the entrepreneur, and was happy to invest in marketing," remembers Peter. "One of my workmates, Terry Pudwell, was competing in the British Formula Three championship, and Clem decided to sponsor him for a championship race at Silverstone." The sleek car, complete with CRL livery, a corporate hospitality tent and pit and garage passes all made for an exciting day out for George, Peter and their families. "From the vantage point of my advancing years, I thought of Clem as a bright and bushy-tailed youngster who was always good fun to be with."

Research and entertaining days out aside, progress on *Formula One* the game was painfully slow, thanks to bugs and the way in which they were diagnosed. "The only way to find them was through printouts of the code," winces Peter, "and it was on that horrible thermal printer paper, which did insist on rolling up while you were working through it. There were times when the living room floor was covered in small sheets of thermal paper

> ## "It was a major frustration to get a new executable, start a test run and then hit a bug"
> ### Peter Wheelhouse

with George and I crawling across them, working our way through the code while trying to avoid disturbing the paper carpet." Development of the game involved the pair meeting up regularly, usually with their partners of the time, who would no doubt smile and nod as the talk turned to Spectrum code, graphics and motor racing.

And it was worth it. *Formula One*, released by CRL in 1985 on the ZX Spectrum, was the game that fans of the sport had been waiting for. True to its creators' beliefs, one to six players could compete in a full Grand Prix racing season, taking control over 16 races, monitoring and improving drivers, cars and the precious pit crew. Data about each track needed to be analysed and carefully noted before the race itself played out, with unfortunate events occurring for those who failed to prepare correctly. The game's main race display would become a focus for huddled excitement, the brightly coloured cars zipping across the screen. "CRL would get letters from people who bought their games, and we got our share," remembers

» [ZX Spectrum] Each driver and car has strengths and weaknesses.

» [ZX Spectrum] The grid layout isn't the most exciting thing to look at.
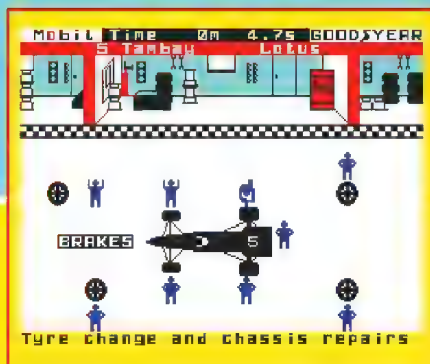
» [Amstrad CPC] Tyre change in progress during a race.
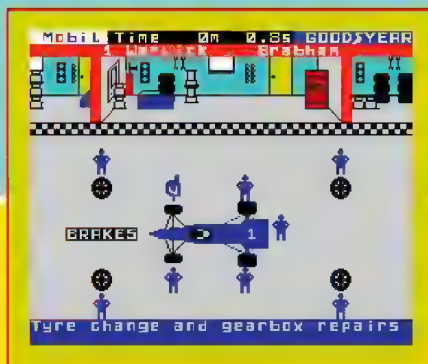
» [ZX Spectrum] Frequent pit stops are inevitable.

» [ZX Spectrum] Each race is preceded with information such as course records and conditions.

Peter. "It was mostly really flattering to hear from people who were getting so much enjoyment out of what we had developed – especially when we learned that groups of friends would spend incredibly long periods playing the game, not only overnight but sometimes over multiple days." On a few occasions, Peter and George even received letters from wives and girlfriends, complaining about the amount of time their partners were spending on their Spectrums, and exasperatedly requesting the coders somehow limit the playing time of their loved ones.

With Formula One in the shops and selling decent quantities – enough royalties to pay for all their equipment and towards a few skiing holidays, according to Peter – the two men began development on a follow-up in early 1985. "It was to be similar, in that it was essentially a motorsport management game, but with a more real-time feel to it." While writing Formula One, Peter had discovered that he could write code to run within the Z80 interrupt system and connect it to the main program code, running normally. "The Z80 interrupts on the Spectrum ran at 50 cycles per second, and I put the user interface and graphics into modules to run within a single interrupt while all the calculation code ran normally." The result

was a continually ongoing race, even while one of the players was interacting with the game. The increase in speed was vital given that the game would be based around motorcycle endurance racing, condensing 24 hour races such as the Bol d'Or down to just one hour. "It made for quite a frenetic experience," laughs Peter. "You couldn't dare go for a cup of coffee or ignore the game once a race had started."

While not as successful as Formula One, Endurance convinced George and Peter to start working on a fourth project, a World War One strategy game that included the ambitious possibility of linking two Spectrums together for multiplayer action. Sadly, when Peter was posted to Lisbon shortly after they began development, the unreliability of the Portuguese electrical supply and – critically – its slow postal service, scuppered the development. "At the time, the length for delivery was indeterminate and, if one made several multiple postings over several days, it was not certain in what order they would be received," says Peter. After six weeks of little progress, the game was abandoned, and it was never resurrected, even when Peter returned to the UK.

But for these two computing fans, it's the brilliant ZX Spectrum Formula One simulation that they

"It was mostly really flattering to hear from people who were getting so much enjoyment out of what we had developed"

Peter Wheelhouse

always most fondly looked back on. While George Munday sadly passed away in 2009, to this day his partner is rightly proud of their finest hour. "We were, I think, pushing the boundaries of the possible on the Spectrum at the time, and certainly pushing the boundaries of our own knowledge! One of the managers of an F1 team at the time said that [the game] was overly simplistic and didn't cover everything needed to run an F1 team. But that missed the point – we wanted a game that anyone could play, and enjoy, without being an expert." ✳

THE CONVERSION KING

We speak to CRL's Richard Taylor about his Amstrad port of Formula One

"I did several of CRL's Spectrum-to-CPC conversions in that era. I have just looked at the wiki page – I had no idea that someone would take that much interest! There is even a section on the screen layout differences. As I recall, I was just given a tape of the Spectrum version (no assembler source code, discussion with the authors or other input) and reverse-engineered it and made it work from that. There were no graphics redone, which could have been much better on the CPC. I had to do it in the low-res mode (160x200) as there were more than four

colours on the screen. But [it was] a waste, really, as there are only the Spectrum's eight colours used. This is also why it is narrower than the Spectrum (256x192) version. However, the problem with the CPC was always that it was underpowered given its frame memory size (16K as opposed to Spectrum's 6K) with the same CPU clock and no hardware assist for anything. So, I think I had to do a fair bit of optimisation work just to get it going at roughly the same framerate, although, to be honest, I don't think it was ever as good as the Spectrum version."

CRL PRESENTS—
FORMULA ONE
BY G.B.Munday & B.P.Wheelhouse
» [Amstrad CPC] Richard feels his conversion suffers against the Spectrum original.

Hand Controller

» **PLATFORM:** ColecoVision » **RELEASED:** 1982
» **COST:** $19.95 (launch), £65+ (boxed, today), £9+ (unboxed, today)

When designing the default controllers for the company's new console, the engineers at Coleco clearly had one eye on what had worked elsewhere, as the bulky device incorporated a number of popular features. At the top end, a stubby joystick provided directional control, while the side-mounted position of the buttons were reminiscent of the Intellivision controller – though the ColecoVision's buttons were larger and easier to push. The numerical pad, a common inclusion at the time, supported plastic overlays to aid in memorisation of complex functions. The controllers were housed in the console's shell when not in use and attached via coiled wires to cut down on mess but were removable in case of problems.

Unfortunately, while the console itself felt like a good step forward, the controllers were not such an advance. The joystick could be a struggle to work with, as its stiffness led to feelings of unresponsiveness. Worse yet, the combination of large size and light weight suggested a certain cheapness to the controller's construction, and that impression proved to be accurate as they proved easy to break. Perhaps unsurprisingly, Coleco was keen to push players toward alternative 'Expansion Module' controllers such as the racing wheel. ★

ESSENTIAL GAME
ZAXXON

Recognising that the ColecoVision's controller isn't the best in the world but is the one you'll play most of its games with, picking an essential game is an exercise in simply picking one of the best ColecoVision games. And while it's tempting to pick out the console's thrilling pack-in, *Donkey Kong*, another arcade conversion well worth your time is *Zaxxon*. Where the Atari 2600 and Intellivision had to abandon the game's signature isometric perspective, Coleco's version was able to keep it, thanks to the increased hardware power available, and did a better job of retaining the feel of the arcade game as a result.

OutRunners

Sega's System 32 board was the final iteration of its 'Super Scaler' hardware, so it was the perfect platform to bring back the breezy blue sky vibes of the original Out Run. Join us as we race OutRunners from sea to shining sea

WORDS BY MARTYN CARROLL

n RG issue 54 Sega's Yu Suzuki revealed that the main inspiration for *Out Run* was the American movie *The Cannonball Run*. In issue 86 your correspondent suggested that, appropriately, the sequel *Turbo OutRun* was a lot like *Cannonball Run II* – it featured more of what made the original so great, yet it was less than the sum of its parts and didn't work as well second time around.

A dubious analogy, but to continue it regardless, *OutRunners* is the equivalent of *Cannonball Fever* (aka *Speed Zone*), the third film in the series. Both were loose sequels that arrived several years after the previous entry and both were from a different creative team (*OutRunners* was developed by Sega's AM1 team, not AM2). Crucially, both were far less popular than their predecessors and are often overlooked, even by fans.

So how could a game that was essentially 'OutRun 3', with such rich arcade heritage, be almost forgotten? There are several reasons. The first was specification. *OutRunners* was an arcade heavyweight (a 725lb heavyweight, to be precise). For the first time in the series, this game was conceived as a multiplayer racer, so the standard cab was a twin-seat sit-down beast. There were two 26-inch monitors, two steering wheels, two sets of pedals, two cockpit

seats (each with integrated subwoofer), and a hefty marquee that highlighted the race leader. For the ultimate experience, four cabs could be connected for eight-player racing. Picture that – four cabs side to side would occupy 35 square metres of prime arcade real estate. The game was also available in more compact stand-up configurations, but they were always sold as a pair so space and, of course, cost remained an issue for arcade owners.

Then there were the other racing games competing for floor space at the time. In October 1992, six months prior to the release of *OutRunners*, Sega released *Virtua Racing*. This was its first Model 1 release and it utilised 3D polygons, whereas *OutRunners* was a System 32 title that made do with 2D sprites. As such *OutRunners* looked gorgeous, but *Virtua Racing* was groundbreaking. Namco's *Ridge Racer* and Sega's own *Daytona USA* followed, and 2D racers suddenly started to look a little rusty around the wheel arches.

Another reason for the game's relative anonymity was the lack of home conversions. The previous *OutRun* games were ported to just about every system under the sun, but *OutRunners* received just a solitary port to the Mega Drive – and only in Japan and North America. It wasn't great, either. "This is the
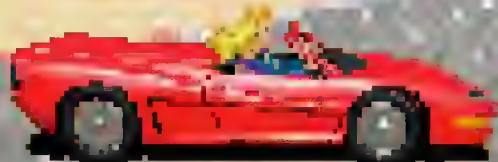
"HOW COULD A GAME THAT WAS ESSENTIALLY 'OUTRUN 3' BE ALMOST FORGOTTEN?"

OUTRUNNERS READY
HOW THE EIGHT MADCAP MOTORS COMPARE

BAD BOY

If you're looking for the car with the fastest acceleration then this roadster comes out on top. Its braking is also very good, but it's the worst car at taking corners, so overall one to avoid.

EASY HANDLING

A retro Porsche-like sports car that has no obvious strengths or weaknesses, making it an excellent choice for novices. As the name implies, it manoeuvres well and is good with corners.

MAD POWER

A Lambo-style supercar that shares maximum speed and many other characteristics with Speed Buster. If you like to faff around with the gears, the manual version has a six-speed transmission.

SMOOTH OPERATOR

A slick Japanese sports car that's almost identical to Easy Handling, in that it's the best balanced car in the game with no special advantages or disadvantages. Great for beginners.

ROAD MONSTER

This pink Cadillac is the biggest car you can choose, which means it suffers from poor acceleration and top speed. However, it's resilient and can take collisions without too much pain.

SPEED BUSTER

Resembling the Ferrari Testarossa from the original, this is the joint fastest car in the game (along with Mad Power). Its acceleration is sluggish but it handles pretty well and is great for drifting.

WILD CHASER

This dune buggy suffers from slow acceleration and limited top speed, but it has one advantage over all the other cars in the game – it barely slows down when you drift off the road.

QUICK REACTOR

For our money, this funny little convertible is the best car in the game, as it's superb on corners. Some of the later stages twist like crazy so it pays to have a car that can handle them.

THE ENDS OF THE ROAD

THELMA AND LOUISE

FIRST PLACE: They make a dash for freedom and the cops give chase and everyone blows up. Really!

RUNNER-UP: The cops prevent them from fleeing and the pair simply smile and shrug it off.
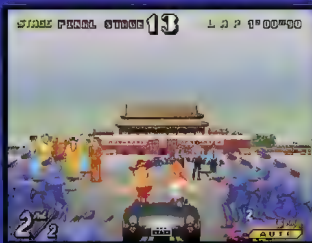
GYM DUO

FIRST PLACE: The driver backflips out of the car, followed by the passenger who lands in his arms.

RUNNER-UP: The driver kicks the car, which promptly falls to bits, then hops around holding his foot.

SMALL AND TALL

FIRST PLACE: She drags him out of the driving seat and gives him a soft kiss for winning.

RUNNER-UP: She drags him out of the driving seat and gives him a hard shove for losing.

THE TOURISTS

FIRST PLACE: The passenger sets up a winner's photograph and a crowd joins them to celebrate.

RUNNER-UP: He takes a photo and a smiley face pops out of the camera. She is not amused.

FAKE ELVIS ON TOUR

FIRST PLACE: Fake Elvis croons to the crowd and they literally bury him in bouquets.

RUNNER-UP: Fake Elvis starts to sing and the crowd rushes forward, leaving him all shook up.

BLOND AND BLONDE

FIRST PLACE: They tie the knot, get thrown into the air and presumably live happily ever after.

RUNNER-UP: He scratches his head like after a crash in *Out Run* and she walks off in disgust.

THE DUMBBELLS

FIRST PLACE: They flex their muscles so hard that their clothes fly off, then pose for the crowd.

RUNNER-UP: More flexing, then they start working out. They lost; they don't give a damn.

THE MOBSTERS

FIRST PLACE: An army of cops arrive but instead of arresting them, they hand them bouquets.

RUNNER-UP: An army of cops arrive and slap the handcuffs on the pair of them. Busted!

The twin-seat cab wasn't one you'd want to drop on your foot.

worst Mega Drive game I've played in ages," commented Rik Skews in the August 1994 issue of C&VG. He awarded the game 48%, and was also critical of the original coin-op. "Sega has virtually defined the way arcade racing games should be with a string of brilliant machines like Out Run, Power Drift, Rad Racer, Virtua Racing and Daytona USA," he wrote. "Somewhere in the middle of that lot came OutRunners, a mediocre sequel of sorts to Out Run."

OutRunners was too much of a leap for the Mega Drive, but surely it was a prime candidate for a Saturn conversion? Between 1996 and 1998 the original Sega Ages series brought a number of the firm's arcade hits to the Saturn including Out Run, Space Harrier, After Burner and Power Drift. In the June 1997 issue of the Japanese Sega Magazine – where the coin-op was called "the final form of the 2D driving game" – the original development team was asked if a Saturn version was in the pipeline. They responded that it would be "easy to convert", but there was an issue. Because the original was designed with multiplayer in mind, and any home version would most likely be limited to two players (either splitscreen, or with two consoles connected using a system link cable), the conversion would be lacking, no matter how accurate it was. Ultimately the game never appeared on the Saturn.

Earlier, in 1995, Sega authorised a version of the game for the Jaguar, as part of a settlement reached between Sega and Atari following a patent infringement brought by the latter. It would have been fascinating to see how the Jag would've handled the game, but none of the proposed Sega games were ever released for the machine.

Since the Mega Drive release you could be forgiven for thinking that OutRunners doesn't exist. It wasn't included in the Sega Ages 2500 series for the PlayStation 2, or the Sega 3D Classics series for Nintendo 3DS (although Turbo OutRun was finally included there, after being ignored for years). It has not featured in the more recent Sega Ages releases for Nintendo Switch – but with later releases like G-LOC and Virtua Racing already appearing, there's a chance it may be announced in the future.

It's telling that Yu Suzuki would return to the series in 2003 with OutRun 2, an undeniably excellent update with a title that effectively put the

previous sequels in the shade. Although Suzuki was not involved in OutRunners, the developers at AM1 clearly approached their follow-up with the same aim: to bring back the pure racing pleasure of the original. Suzuki's own Turbo OutRun replaced the popular branching road system from the original with a continuous 16-stage slog across the USA. OutRunners reintroduced the forks in the road and increased the number of distinct stages to 21 (presented as a 'world tour'), and doubled the number of goals to ten. It also removed Turbo OutRun's boost button, pursuing cops, bad weather and other superfluities – plus the annoying CPU-controlled rival was obviously replaced by (potentially even more annoying) human challengers.

Harking back to the Cannonball Run theme, players could choose one of eight different vehicles, each of which had its own driving characteristics and pair of wacky racers. The game also brought back OutRun's radio which could now be changed in-game and featured a number of new tunes along with remixes of old favourites like Splash Wave and – possibly the best piece of videogame music ever written – Magical Sound Shower.

OutRunners looked back, but it also introduced some elements that would be carried forward to OutRun 2. It added drifting to the series, albeit in its simplest form, and featured far more undulating roads with huge hills and dips. Above all, it's just a very fast, very fun racer that every OutRun fan should definitely seek out. You can give Cannonball Fever a miss, though. ●

[Arcade] The stages stretch across the globe, and you can head out to the east or west.

OutRunners was the fourth OutRun game released for the Mega Drive, and to say they were a mixed bag would be an understatement. Out Run: good. Turbo OutRun: bad. OutRun 2019: good. OutRunners: bad. Okay, it's not terrible, but it's hobbled by a permanent split-screen feature that seriously limits the player's view – corners and hazards come out of nowhere. It's more of a reaction test than a racing game, and fails to emulate the open-road thrills of the original. Rent it from Blockbusters, if you really must.

[Mega Drive] The game is always split-screen, even when you're playing alone.

[Mega Drive] On the Japanese version you can unlock the Virtua Racer car by entering a button code.

THE MAKING OF
SPIDER-MAN

It's fitting that the first Marvel videogame was created by one of the industry's first female developers. Laura Nikolich explains how she joined Parker Brothers and brought Spider-Man to the Atari 2600

WORDS BY RORY MILNE

» [Atari 2600] Spider-Man's objective is to defuse super-bombs attached to the top of skyscrapers by the Green Goblin.

Videogames were a full-blown craze by the early Eighties, which made assembly coders like Laura Nikolich a precious resource. Female programmers were even rarer, and so recruiters for Parker Brothers were sceptical when they met the young graduate at a job fair. "They asked me if I knew how to do real-time assembly-level programming, and I said: 'Well, yeah,'" Laura remembers. "They were amazed, and they scheduled me for an interview, and I got the job. My friends were saying, 'Are you kidding me? You're going to ruin your career!' I was like, 'Well it sounds fun!'"

Soon after joining Parker Brothers' videogames division, Laura was given a high-profile licence to adapt, although not the one she had hoped for. "Spider-Man was assigned to me," Laura notes, "and everybody else was doing Star Wars, which was the big thing back then, so I was like, 'Oh I want to do a Star Wars game!' But I said, 'Alright.' I'd read a few of the Spider-Man comic books as a child, although not that much. But he was a big deal, I just didn't realise that."
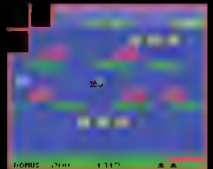
Like all Parker games, Spider-Man's design was a group effort by the firm's games team that was then presented to its marketing department. "We got together and brainstormed how to do the game," Laura recollects, "and then we made storyboards to show to the marketing people. They wanted Spider-Man to scroll horizontally, but with the limitations of the system it made more sense to scroll vertically, and they finally agreed because we could do much better gameplay that way."

The core gameplay devised for Spider-Man involved swinging from web to web to the top of buildings, rather than crawling up them. "If I had him crawling instead of on his web it would have been way too memory intensive," Laura explains, "I would have had to have had

> "HE WAS SPIDER-MAN, SO HE HAD TO BE ABLE TO SAVE HIMSELF! AND IT WASN'T HARD TO HAVE HIM SHOOT HIS WEB AND SNAG THE BUILDING"
> **LAURA NIKOLICH**

multiple frames of Spider-Man one after another to show him moving up the building. And actually, nobody ever thought of it, because we all knew the limitations of the system."

A secondary objective played to the strengths of Spider-Man's host hardware, where the hero caught criminals and defused bombs to replenish his limited webbing. "The tradition was that Spider-Man was always catching criminals," Laura reasons, "and you had to give players a reward for that. I also didn't want to make it so that players could just go up in a straight line. That would have been boring! You had to make it so that players had to play the game."

As well as connecting mechanics, Laura also added jeopardy to her game by tasking its villains with cutting Spider-Man's web, although the hero could spin more as he fell. "He was Spider-Man, you know, so he had to be able to save himself!" Laura points out. "And it wasn't hard to have him just shoot his web and snag the building, because that was in the game anyway from when he was swinging upwards. It also made the gameplay
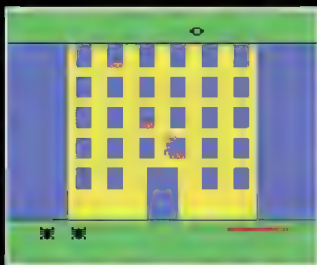
DEVELOPER HIGHLIGHTS

SPIDER-MAN
SYSTEM: ATARI 2600
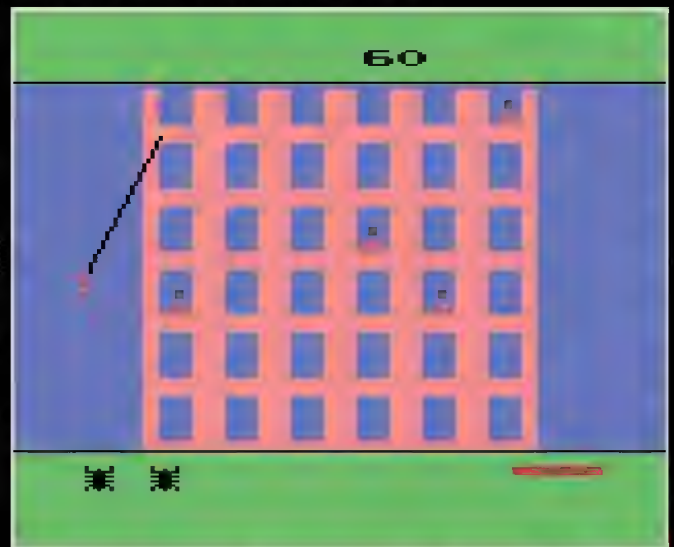YEAR: 1982

CARE BEARS (UNRELEASED)
SYSTEM: ATARI 2600
YEAR: 1983

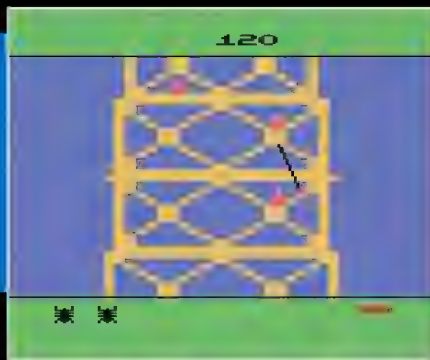**FROGGER II: THREEEDEEP! (PICTURED)**
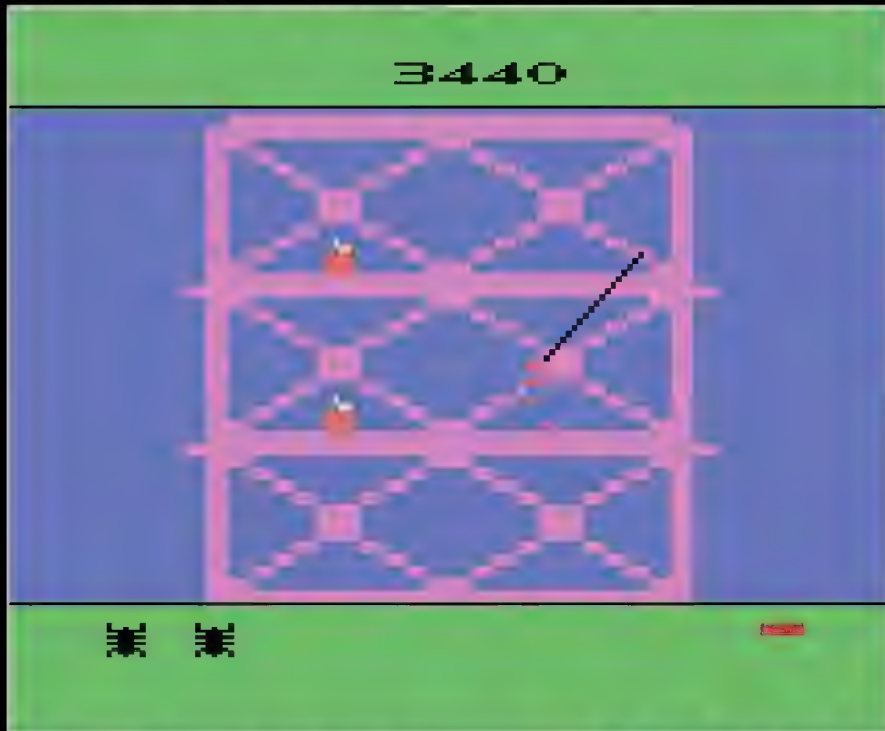SYSTEM: COLECOVISION
YEAR: 1984

» [Atari 2600] You get you more webbing and time when you apprehend the Green Goblin's henchmen.

» [Atari 2600] There are pumpkin bombs in *Spider-Man* that you defuse for extra time and webbing.

» [Atari 2600] You can't catch the Green Goblin, but he can send you falling downwards.

» [Atari 2600] Precise web-spinning is required to swing from the smaller tower sections of the buildings.

better, because it gave the player a way to redeem themselves."

As well as criminals with sharp knives leaning out of skyscraper windows, Laura also gave Spider-Man a supervillain boss to get past, more specifically his archenemy. "The Green Goblin was chosen mainly because of the ease of using him," Laura acknowledges, "you couldn't do the octopus guy because there was a small pixel set to build the opponent. Also, it was easy to use the same type of algorithm that we used for Spider-Man to fly the Green Goblin around the tower. He was the last enemy before you got up to the top to defuse the super-bomb, and that was the final challenge, so he had to be tough."

Nevertheless, a young relative of a Parker Brothers colleague found a sneaky way to breeze past the Goblin while playtesting Laura's game. "The biggest bug that I had to fix didn't occur to any of us while we were playing the game," Laura grins. "One kid went over to the

side of the screen and just climbed straight up into the air! He thought it was great fun. It only took me five minutes to put a hit detect in, but who would have thought?"

Having had its accidental cheat mode removed, a wave of publicity announced *Spider-Man*'s release, which was followed by great write-ups and brisk sales. "I was thrilled!" Laura beams. "I went out and bought all of the magazines that had reviews of *Spider-Man* in them. I thought the TV commercial was okay, although maybe a little bit overdone. But that was the marketing people."

Reflecting on her Atari 2600 hit now, Laura wouldn't change a thing, and she's rightly proud that *Spider-Man* still plays well decades after it came out. "I did the best I could with what I had, so I don't really have any regrets," Laura considers. "*Spider-Man* has weathered the test of time. You can't hold it up against the games of today, but it was the first pass at home videogames, and I'm very proud of it." ★

CONVERSION CAPERS

THE ORIGINAL VERSUS THE UNRELEASED ODYSSEY 2 VERSION
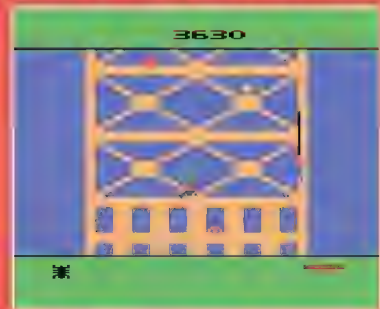
ATARI 2600

Despite the graphical limitations of the Atari 2600, the original has nicely rendered depictions of Spider-Man and the Green Goblin. Its responsive controls and pixel-perfect hit detection mean that swinging up the buildings, nabbing crooks and disarming bombs rarely feels frustrating, and when it does you're to blame. As the levels progress, your time and webbing meter runs down more quickly, making the swift essential for catching bad guys and defusing explosives more vital each round.

MAGNAVOX ODYSSEY 2

Unlike the original, the Odyssey 2 adaptation starts with an animated intro where Spider-Man swings across the screen, but the actual game isn't a round from it. Spider-Man and the Goblin are monochrome, the Goblin's glider looks like a steam iron, the bombs are pincushions and instead of criminals you get either windows or cards. That said, the Odyssey 2 version sounds the part, and it plays just like the original, except that its tower sections are trickier to web over.

ocean

SOFTWARE FRANCE

Having established itself in post-industrial Manchester, Ocean Software rode the waves to France to set up a new studio that would handle most of its 16-bit coin-op conversions

Words by David Crookes

» [SNES] *Mr Nutz* was created by two Ocean France devs – graphic designer Phillipe Dessoly and programmer Pierre Adane – after the company had formally begun focusing on sales and marketing.

cean Software's former developers often tell of long days working in the 'dungeon' – the windowless basement of 6 Central Street in the heart of Manchester. There, immune to the inevitable rain that would pound the ground, they'd create some of videogame's most iconic titles. Yet this location doesn't tell the full story.

As Ocean bid to become one of Europe's leading developers and publishers, it looked to expand its horizons, soon venturing across the English channel from where it would bring the gaming world some of its finest 16-bit coin-op conversions. "Things happened really quickly," recalls Marc Djan, of the decision to push ahead with a French subsidiary company in 1986.

Ocean's cofounder David Ward had long had his eye on France. As a strong Francophile, he knew it was a strong market and that there was plenty of opportunity for any company which could build strong contacts with retailers, advertisers and the media. Marc was the editor of the French videogame magazine *Génération 4* and he knew many talented people in the fledgling industry.

"I had met David many times as part of my job but was also working on an indoor football game called *Hotball*, so David visited me in Paris to take a look," Marc says. During this meeting, the conversation moved swiftly. "David told me that Ocean needed a team to convert the arcade games *Operation Wolf* and *Bad Dudes Vs DragonNinja* on to the 16-bit computers," Marc says. "I knew a lot of French programmers were

already coding on 16-bit machines so we decided to open Ocean Software France."

Marc became the new division's head and he promptly hired three programmers and three graphic artists to work on the arcade conversions for the Commodore Amiga and Atari ST. First to be released was *Operation Wolf* which, despite suffering from too much disc-swapping, looked and sounded fantastic (*C&VG* magazine gave the Atari ST version 91%). It also sold well, as did *Bad Dudes Vs DragonNinja* when it was released on the company's acquired Imagine label. The move into France was already paying off

"Marc was running the facility and I oversaw it, travelling over there every couple of months," says the former UK software development director Gary Bracey. "There were a lot of very talented developers over in France so it made sense to have a dev studio out there." Marc was certainly keen to seek out more work.

"I had a connection with French coin-op distributors so I soon began to find good arcade games to convert," recalls Marc, whose team worked in Sarcelles, a commune in the northern suburbs of Paris. "I'd inform David who would work to get the licences. We also became special because we decided from the very beginning to stay as close as possible to the original coin-op and we had really great graphic artists."

To work on a growing number of titles, Ocean Software France began to recruit more developers, among them was Michel Janicki who had previously coded on the Commodore VIC-20 and C64 and was making a name for himself on the 16-bits. "I'd read in a computer magazine that Ocean Software France was hiring and, because it was a well-known
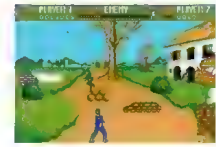
» [Amiga] Level two of the original *Cabal* did not make it across to the Amiga and Atari ST ports of the game, but it was otherwise faithful.

» [Amiga] *Bad Dudes Vs Dragon Ninja* was one of the first games converted to the 16-bits by Ocean Software France.

> **"I knew a lot of French programmers were already coding on 16-bit machines so we decided to open Ocean Software France"**
>
> Marc Djan

TIMELINE

1986	1988	1988	1989	1990	1990	1991
■ Ocean Software France is formed as a subsidiary to Ocean Software (UK).	■ Debut game *Operation Wolf* is the developer's first coin-op conversion.	■ *Bad Dudes Vs DragonNinja* becomes Ocean Software France's best-selling game.	■ Ocean Software France brings *Cabal*'s chunky sprites to the 16-bits.	■ The exclusive, original 16-bit game *Ivanhoe* is developed.	■ More coin-op conversions include *Plotting* and *Pang*.	■ Journalists preview *Liquid Kids*, *Hammerin' Harry* and *Snow Bros*. None are released.

» [Amiga] *Ivanhoe* had impressive cartoon-quality graphics but this original game was annoyingly repetitive.

studio and I wanted to work in the games industry, I contacted them," he tells us.

At first, Michel was asked to convert the arcade title *P47 Thunderbolt* but the project didn't work out. He was then assigned the Amiga version of *Beach Volley*, an original game that had been designed by Marc to fill in time between acquiring coin-ops (Marc would often contribute graphics to Ocean Software France's titles).

Cabal was the next major game to be taken on board, converted from TAD Corporation's original shooter. Michel became a key coder on this port and he was assisted by Guillaume Saviard on the Amiga, with Jean-Charles Meyrignac working his magic on the Atari ST.

"When we started to convert a coin-op game we would get hold of an arcade machine and play for hours while taking notes and having so much fun," Michel says of the typical process. "Then I would program and try to respect the gameplay of the original as closely as possible." That said, in the case of *Cabal*, the original level two involving scuba divers

» [Amiga] Ocean Software France was set up to port arcade games such as *Operation Wolf* to the 16-bit micros.

was dropped and, as a consequence, a five-level game became a four-level one. "We were having a hard time recreating the original," explains graphic artist Thierry Levastre of this quirk.

Michel and Jean-Charles also worked on an original title called *Ivanhoe* which, again, was released on the Amiga and the Atari ST. "We decided to create new games such as *Ivanhoe* because sometimes Ocean in the UK was slow to get a licence and our teams would be free after finishing their games," Marc explains.

In this case, Marc designed the game with Michèle Bacqué but the reviews were mixed upon its release in 1990. It's not that the graphics weren't superb – French games were generally artistic and this game was no exception – but the animation was sluggish and it also suffered from repetitive gameplay. Indeed, *Amiga Power* praised the presentation but said: "Next time can we have a game supplied with our pretty pictures, please?" Perhaps part of the issue was that development had not been straightforward.

"I had been hired to finish the game on the Atari ST because finishing games was my speciality," says Jean-Charles, who was known on the Atari demo scene as Mcoder. "The programmer had undertaken compulsory military service and he'd volunteered to spend an extra year at La Réunion [an island in the Indian Ocean] but I told Marc that I could release the game because I was already a games programmer with six years of experience."

When Jean-Charles, got hold of the title, it was in a reasonable state. "But it needed some polish," he tells us. "Basically, I removed some levels and fixed the bugs, trying to optimise some slow parts." With that complete, he moved to the Atari ST ▶

1991	**1991**	**1993**	**1998**
■ *Toki* is praised for its pixel-perfect coin-op conversion.	■ Ocean Software France concentrates on sales and marketing.	■ French developers Philippe Dessoly and Pierre Adane work on *Mr Nutz*.	■ Ocean Software France closes when Ocean Software is sold to Infogrames.

DNA OF ocean SOFTWARE FRANCE

COIN-OP CONVERSIONS

■ The French subsidiary of Ocean Software was mainly tasked with converting arcade coin-op titles and it ended up creating faithful versions of games originally created by the likes of Taito, Data East, TAD, SNK and Konami. *Toki* was particularly praised for being as good as the original, especially in terms of its graphics.

TALENTED FRENCH DEVS

■ Not only did the studio look to find top talent, it also encouraged internal competition. The Amiga devs (Michel Janicki, Pierre Adane and Pierre-Eric Loriaux) would try and better their Atari ST rivals (Jean-Charles Meyrignac and Alain Boisramé). Games released on both systems would be produced from scratch.

LEAPS OF FAITH

■ Rather than wait to see if Ocean Software could secure its desired coin-op licences, Ocean Software France would often crack on and develop a game, assuming pen would be put to paper further down the line. *Liquid Kids* was in development for ten months before the team realised no deal was coming!

» [Amiga] *Snow Bros* was never commercially released by Ocean Software France, despite taking many months to develop.

▶ conversion of *Cabal* and completed it in a month, gaining immense job satisfaction.

It helped that the office was split among two teams: one creating Atari ST games and the other Amiga. "There was strong competition between the Atari and Amiga coders, with everybody wanting to make the best possible game," Jean-Charles explains. "The Atari ST coders were stronger, though, because everything had to be done by software – displaying the sprites required shifting them with four planes and it was a slow process. The Amiga coders used the blitter coprocessor."

By 1990, Ocean Software France had certainly hit its groove and it was taking on arcade projects that weren't necessarily big-name blockbusters such as the Taito puzzler *Plotting* and the 16-bit conversions of *Pang* – Thierry creating graphics that were as near arcade-perfect as they could be, complete

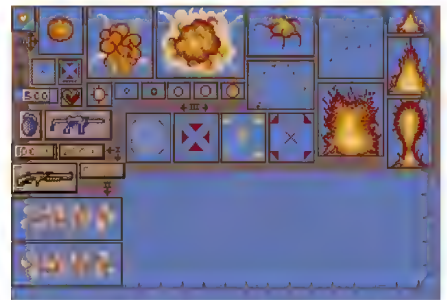» [Atari ST] *Pang* allowed Thierry Levastre to show off his talent for graphics with some amazing scenic backgrounds.

» [Atari ST] *Plotting* was one of the best puzzle games of the very early Nineties, and was named number six of all time by *ST Format*.



» The team at Ocean Software France would always play games such as *Cabal* to death before looking to recreate the graphics.

16-BIT COMPUTERS

With the Manchester team very much involved in creating 8-bit titles for the Amstrad CPC, ZX Spectrum and Commodore 64, the French team concentrated on the development of games for the main 16-bit computers of the day, the Commodore Amiga and the Atari ST. It finished off by dabbling with consoles with *Mr Nutz*.
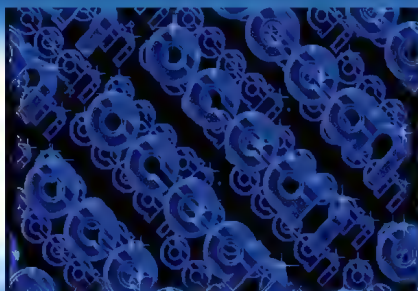
SALES AND MARKETING

After closing down the video-game production side of the company, Ocean Software France switched to simply being as the Manchester firm's sales and marketing arm, promoting UK-made games for the remainder of its life. It worked on the largely correct assumption that selling in France meant selling in French.

» *Liquid Kids* was developed in great detail over the course of ten months.

with beautiful backdrops against which the frantic balloon-popping was played.

"The graphics were made on the Atari using DEGAS Elite and NeoChrome at first, then on Sprite Editor and Map Editor which were software developed by Ocean," Thierry says. "We'd take the original arcade games that were integrated in small metal suitcases and plug them in using Péritel [SCART] connections to a television. We had a pause button on these cards and we were capturing the background, digitising each RGB channel independently. The result was average but it made for a good starting base. The sprites were reproduced pixel by pixel. We were fierce."
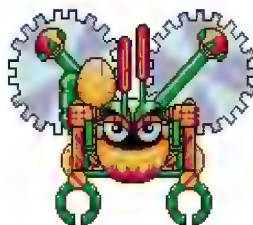
Indeed they were. In 1991, Ocean Software France released the shoot-'em-up platformer *Toki* which had pixel-perfect graphics so impressive many a gamer proclaimed them better than the original coin-op version.

"We reprogrammed the whole game, according to the constraints we were given," says

> « The result was average but it made for a good starting base. The sprites were reproduced pixel by pixel. We were fierce »
> Jean-Charles Meyrignac

Jean-Charles. "For example, I wanted to have a fullscreen scrolling for *Toki*, but Marc insisted on a vertical display. I also remember the graphic artists playing the original game and pressing a button to pause it so that they could reproduce the pictures manually. Sometimes, the button crashed the game, so they had to replay the whole game to try to reach the frame they wanted."

By this point, Ocean Software France had hired about 15 employees and their talents were shining through. Even so, frustration bubbled. It wasn't so much that the studio building didn't seem to be in the best of shape ("It was rotten and certainly stuffed with asbestos," says Thierry. "I remember the electricity was once cut because someone had not paid the bill…"), but some work was starting to go to waste.

Four games in particular were never published: *WEC Le Mans*, *Liquid Kids*, *Snow Bros* and *Hammerin' Harry*. Of those, the latter three cutesy arcade games are perhaps the most curious since they were rather far into their development when the plug was pulled. In fact, they were even previewed across three pages of *Zero* magazine, and yet it transpired that Ocean Software in the UK simply couldn't get the licences.

So why crack on with development in the first place? "Sometimes we decided to anticipate a signature by starting and even finishing games before getting the licence in," Marc explains. Thankfully, two of the games – the side-scroller *Liquid Kids* based on a Taito original and the *Bubble Bobble*-esque *Snow Bros* were saved in 2003 and 2006 after copies were found and leaked online.

Shortly afterward those games were canned, however, Ocean Software France pulled back from in-house development. The company instead began to manage sales and marketing for Ocean Software's games. "Marc decided to stop prod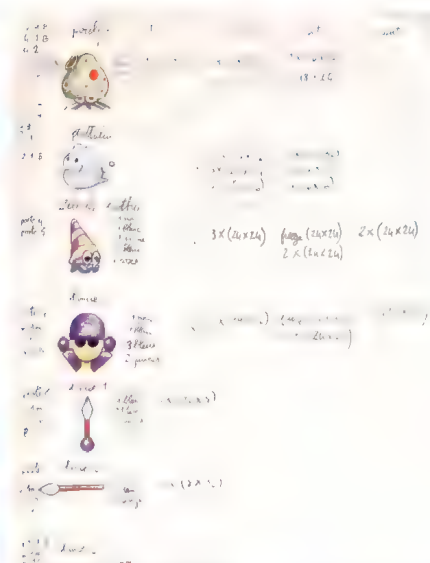ucing games and so we were all fired," Jean-Charles recalls, bluntly. But one of the problems facing the French team was a rise in 16-bit development by the team in Manchester.

"Once our guys moved on from the 8-bits, we did more of the conversion stuff on 16-bit," says Manchester-based artist Paul Hughes. Given neither of the two teams had met or worked together, joint projects were also seemingly off the table. "They did their projects and we did ours and, in general, never the twain met," Paul continues.

In the last throes of its life Ocean Software France worked on *Mr Nutz*, with Pierre Adane and Michel Dessoly spearheading its creation on the SNES, Mega Drive, Game Boy Color and Game Boy Advance. "The hope was to challenge *Mario* and *Sonic* but we never reached this goal," says Marc, who was nonetheless pleased with the sales.

"*Mr Nutz* was an incredible success in France for Christmas 1993, though," Marc continues. "I remember crying when watching kids requesting the game in the store. It was out of stock after four days." Despite that, it would be Ocean Software France's absolute final development and, when Ocean Software announced a £100 million merger with French publisher Infogrames in 1996, the writing was on the wall for Marc's subsidiary.

By 1998, a decision was made to rebrand Ocean Software to Infogrames and Ocean Software France was no more. Even so, the company will be fondly remembered for its quality conversations. "All the games I worked on at Ocean were special and they are known and recognised by fans and retro gamers today," says Thierry. "Although I've made many games since. I am sure few will have the same honour." ✦

» Ocean Software France had its own map editor to help with the creation of its games.

The Last Blade 2

How can a 2D fighter stand out in a world of 3D games? Simple – by pushing ageing hardware to extremes

» **PLATFORM:** NEO GEO » **RELEASED:** 1998 » **DEVELOPER:** SNK

One of the crucial components in pushing a system's limits is time. Every worthwhile piece of gaming hardware is designed with capacity to accommodate the growing ambitions of developers, and once the best tricks are learned and the barriers of the past are removed, the possibilities can be quite amazing. The Neo Geo was blessed with a long life, and it shows – sometimes, it's hard to believe that *Fatal Fury* is running on the same hardware as an amazing game like *The Last Blade 2*.

SNK's second entry in the weapons-based fighting series featured all of the same elements that made the first game great – game design shaped by years of exploration within the genre, and a 19th century theme that influenced the visuals and soundtrack. The game simply delivered more of it, using an extra 80 megabits of ROM capacity to introduce additional characters, an even more eye-catching introduction sequence, and a new set of backgrounds and music.

While *The Last Blade 2* doesn't break any of the Neo Geo's theoretical limits (except for cartridge size, which its predecessor also did), the game shows the system's capabilities being used to their fullest in every respect. The classical-inspired music is as good a demonstration of the Neo Geo's digital sound hardware as you'll find, the animation is amongst the best on the system, and the background detail is superb. The game even uses the sprite scaling capabilities of the hardware, which weren't often employed by the system's later games.

Thanks to the fact that it's fairly widely available, *The Last Blade 2* sells for pretty reasonable prices. Neo Geo cartridge versions are, of course, very expensive, but the game was also the penultimate Neo Geo CD release. Although it suffers from the system's notorious loading, it features an extra character, voiced cutscenes, a gallery mode and a quiz minigame, and will set you back £30 to £70. The Dreamcast conversion has a hanafuda card game instead of the quiz (but only in the Japanese version), and runs between £20 and £40. The arcade game was released in a double pack with the original for PS2, and also sells for £20 to £40. The game is also available digitally on all current platforms. ★

JUZOH

POWER

MAX

CREDIT 00
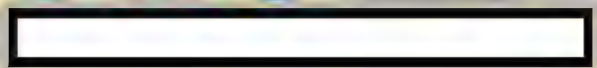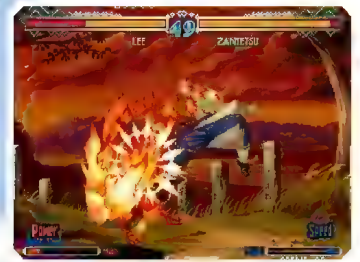
Crazy Capacity

Detailed backgrounds, great animation and excellent audio all require lots of ROM capacity. *The Last Blade 2* occupied 554 megabits of storage, exceeding the 330-megabit maximum the system was designed to handle.

Amazing Artwork

While the Neo Geo could push plenty of colours, the artists were able to do a lot with a little. The Fire At The Wadamoya background is one of the greatest backgrounds in any fighter, and uses just 16 colours in total.

Subtle Scaling

The Last Blade 2 uses sprite scaling in moderation, zooming out a little when fighters move apart. The result is a more dynamic presentation than in *The King Of Fighters* series, without the jarring motion of *Art Of Fighting*.

Sampled Sounds

SNK opted to use the Neo Geo's PCM sound capability as the basis for *The Last Blade 2*'s soundtrack, using real instrument samples rather than the system's strong but situationally less appropriate FM sound capability.
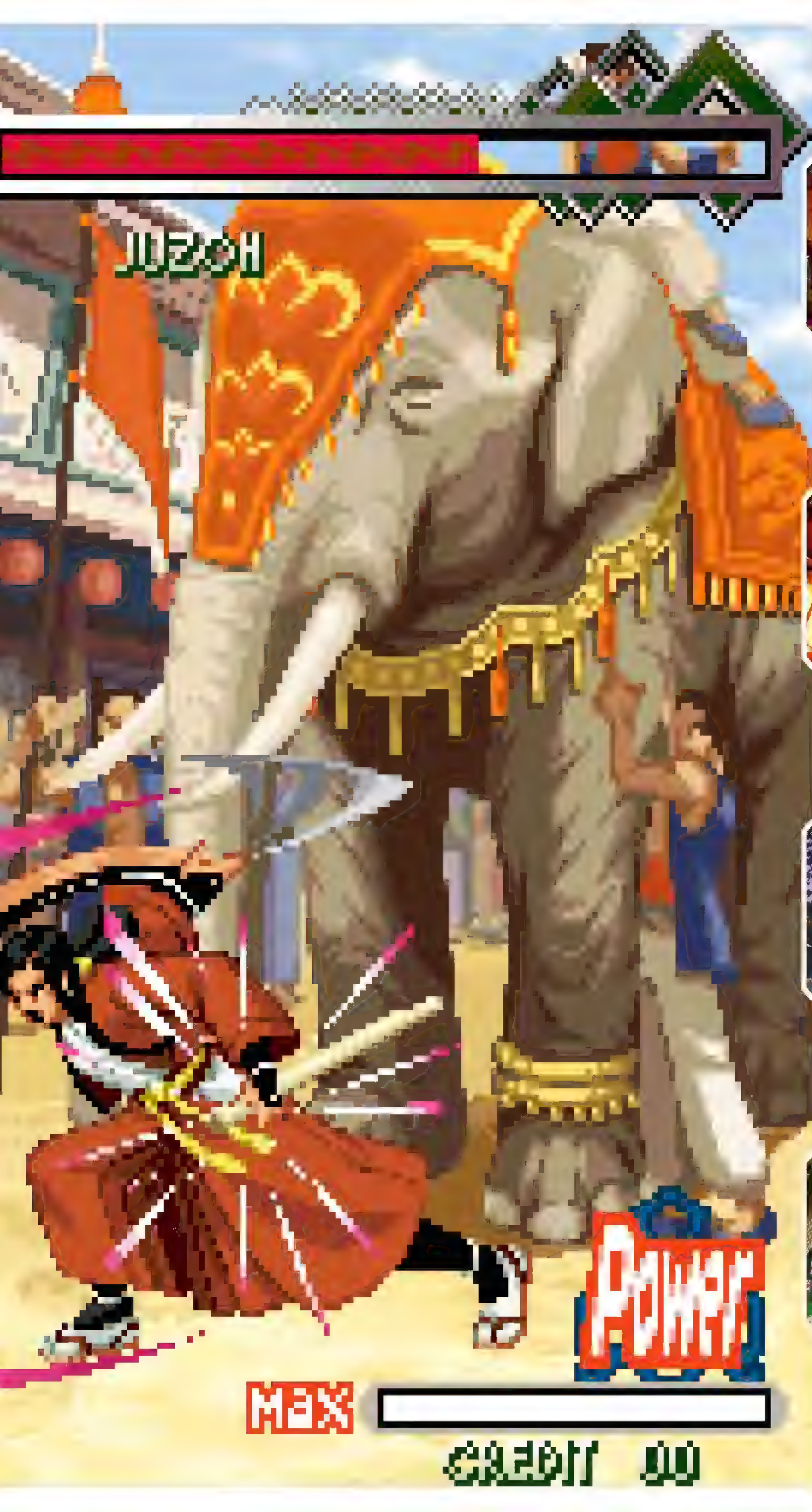
PLOK ™

SHIGERU MIYAMOTO ONCE LISTED THE THREE BEST PLATFORMERS, PUTTING HIS OWN CREATION MARIO AT NUMBER ONE; SONIC BY RIVALS SEGA CAME SECOND; AND IN THIRD PLACE PLOK, BY THE BROTHERS JOHN AND STE PICKFORD. JOIN THE PARTY AS EVERYONE SHARES RECOLLECTIONS!

Words by John Szczepaniak

Plok **is actually the second** *Plok* **game.** The first was called *Fleapit*, a coin-op started in the late Eighties by John and Ste Pickford, of then Zippo Games, for Rare. It was never released. "I was working at Zippo when John and Ste were developing *Fleapit* on the Razz Board, Rare's custom hardware," explains Lyndon Brooke, who was part of the *Plok* design team and did most of the pixel art. "It was in a playable state – from what I remember, you could throw Plok's limbs around and there were levels featuring large items of food."

Today, sadly, there doesn't appear to be any data left from *Fleapit*, apart from some screenshots on the Pickford bros' website showing the font and title (www.zee-3.com). There are, however, numerous design sketches by Ste, detailing how *Fleapit*'s lead character, Plok, was based on an idea from John to have someone wearing a hangman's hood. According to Ste's online portfolio, the earliest sketch was likely drawn in the margin of design documents belonging to Zippo's *Ironsword*, sometime around 1989. The lack of surviving code is especially unfortunate since *Fleapit* was described by the Pickfords as half-finished and fully playable. Despite all the work done, it was cancelled by the closure of Zippo Games. What

CHUN WAH KONG

JOHN BUCKLEY
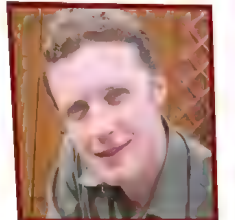
LYNDON BROOKE

had been started, though, would be resurrected at Software Creations under the new name of *Plok*.

"Nobody had a playable version anymore," says John Buckley, sole programmer and codesigner, describing his joining the new project. "We did have a video of the [original] game being played, showing Plok sliding down slopes and firing his limbs at the fleas. So that's where I started with it."

Thus the core team for the new project was set: John and Ste Pickford, handling design and graphics, plus Lyndon and Buckley, joined by George and Tim Follin for music, and later Chun Wah Kong handling quality assurance. "I was 18 and started in spring 1993," recalls Chun. "We worked in the basement, dubbed 'the dungeon', and were at the end of testing *Equinox*. *Plok* was already in an advanced stage; virtually everything was in place – graphics, music, levels. Buckley and Brooke were eager to see how my fresh eyes would react to it."

This period in the early Nineties was one of creative freedom for the small Manchester developer. Software Creations had been one of the first companies to acquire a SNES development kit (see **Retro Gamer** 19 and 20), and it's obvious they were having fun with the new hardware. During development *Plok* would end up incorporating multiple types of jump, a unique physics system based around the shooting and recovery of limbs, a plethora of costumes/vehicles which changed how Plok functioned, plus diverse puzzles to make use of said tools. Golden shells could be collected for an

> **"We did have a video of the [original] game being played, showing Plok sliding down slopes and firing his limbs at the fleas. So that's where I started with it"**
> **JOHN BUCKLEY**

extra life out, after finding the Amulet, Plok could stimulate himself by tapping L and R, erupting shells from his head, unlocking a powerful buzzsaw attack. If they needed more help fighting enemies, players could even release the bees! We're not joking, Plok could send out 'buddy hornets' he'd collected. The list of cool ideas seems almost endless; more than most platformers had, but not more than you'd want.

John Buckley puts all this down to the Pickfords, "*Plok* was just another project when I started it. But John and Ste gave Lyndon and I a lot of room to add stuff, which made it a treat to program and develop, and I'm sure everyone involved felt the same."

Chun's recollections echo this, "The main character was extremely well-designed, with a lot of characterisation. Plok has a vast array of moves for a platform game and it was fun just throwing his limbs around. Soon though, you realise strategy comes into play, as solving certain puzzles you end up losing both your legs. So you have to hop around on your backside. When that happened I couldn't help but think, 'Wow, ingenious!'"

While the initial Cotton Island stages are your standard 'reach the goal' fare, later stages require Plok to sacrifice arms and legs, literally, in order to ▶

SCORE 178440

SCORE 260130

» [SNES] The sprawling levels require you to search for and kill all the fleas. It's quite a challenge when you include all the environmental traps!

SCORE 222350

SCORE 224170

SCORE 258270
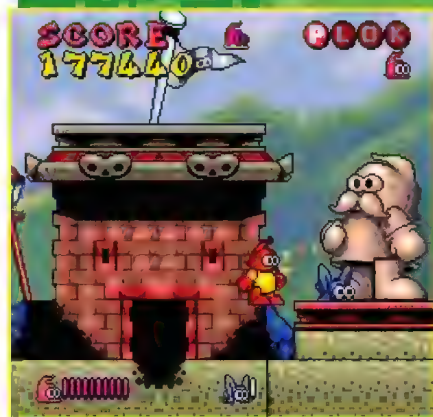
▶ open gates, blow up bits of scenery, or activate platforms. It's possible to retrieve limbs from coat hangers at key locations, but players need to manage how they spend their limbs, lest they find themselves backtracking (on their backside) due to running out.

As Lyndon already explained, the throwing of limbs existed in *Fleapit*, it was always a part of *Plok*'s design, but he adds, "The lock-and-key puzzles came later. We'd developed the system for animating large sections of scenery but the early examples were playing on a loop, which looked a bit rough. That led to the idea of using limbs to trigger them and it was a couple of weeks later before the coat hanger design came to mind. The main challenge was how to animate the background without breaking the collision system and creating a horrible jolt in his movement."

Programming all these features fell to Buckley. "It was a unique idea firing the limbs and getting them to return," he recalls. "It was also a challenge to program because the code would always evolve. Routines would start off nice and tidy and then stuff

would get bolted on throughout development. During the design of the first eight levels, limbs were only used to kill logs and other obstacles. However, we soon realised that since limbs took a while to return, this could be exploited as a feature."

This mention of opening levels throws up a bit of mystery. Anyone who has played through the official release of *Plok* knows the opening Cotton Island is fairly simple. Next, players are introduced to the 'flea hunting' levels on Akrillic (the biggest island in Poly-Esta), which are open and sprawling, with flea eggs hidden all over. Players are free to move where they please and after each flea is killed the exit unlocks. These are followed by sepia-toned dream stages, featuring Plok's grandpa, which are a bit more linear than the flea levels. Plok then wakes up to find his grandpa's Amulet and resumes his flea hunting, before finally entering the Fleapit area. This last section, which name-checks the unreleased originator of *Plok*, is a succession of wildly original vehicular levels before the final boss. But, back to those opening levels...

"Something which you can verify with Buckley and Brooke," suggests Chun, "is I was told during early development, the grandpa Plok black-and-white levels came at the beginning of the game and not during

PLOK'S LEGACY
HOW PLOK'S DNA CAN BE FOUND IN FUTURE GAMES

YOSHI
▶ It's clear Miyamoto took a strong liking to *Plok*, since many ideas reappear in both *Yoshi's Island* and *Yoshi's Story*. In the former are vehicular transformations, including a helicopter and car, just like *Plok*; the latter has sprawling levels hunting down fruit similarly to *Plok*'s flea hunting, plus a textiles theme.

MICKEY MANIA
▶ In fairness, while *Mickey Mania* starts with a sepia level reminiscent of *Plok*'s grandpappy section, both games are actually taking inspiration from early cinema, of which Mickey's *Steamboat Willie* (1928) is part of. Still, in terms of videogames, *Plok* did it before *Mickey* – and *Plok* was originally meant to start with a sepia tone too!
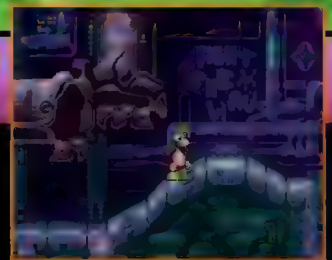
RAYMAN
▶ *Rayman*, just like *Plok*, also started its life on earlier hardware (in its case the SNES), before shifting to 32-bit platforms such as the PlayStation and Jaguar. Rayman also throws his fists to attack enemies while exploring a bright, colourful and surreal landscape. The SNES version (pictured), was leaked in 2017.

» [SNES] In this spooky mist-filled level you need to time your movements to pass through this rotating door without touching the spikes.

» [SNES] To progress you need to 'spend' limbs activating these explosives. Note the continuing textile theme with a button stitched into the foreground.

the dream sequence. It was a brave idea but later deemed too left-field as it didn't provide the same visual impact, so they were moved."

"Well if that's true I didn't know about it," states Buckley. "The first eight levels [I was referring to] are those in the finished product. All the basics for them were done in the first eight weeks of starting the project. The dream levels came about so we could introduce the Amulet to get a bit of 'speed' into the character and help with gameplay at certain parts."

Lyndon's recollections tie those of Chun and Buckley together, as he reveals, "The grandpa Plok sequence was indeed based on the original levels for Cotton Island. These were the first levels to be built and although fun at the time, they were too sprawling to ease the player in. So instead, Ste created the new, more compact levels for Cotton Island and we reworked the old maps as the 'Legacy' levels."

The opening certainly eases you in, however some players will be surprised at how steeply the challenge ramps up! It may look cute, but Plok is a difficult game, so much so we asked Chun if there'd been any debate on it during testing. "I never felt the game was too difficult," he tells us. "It was challenging, but never unfairly. Somebody wanted level one easier, probably the publisher, so we made the bouncing sprouts take one hit instead of two. You can see remnants of this in the tutorial where Plok fires an extra arm at each sprout, when they're

> **I never saw it as difficult. Having said that, I tried it on an emulator a few years back and couldn't play it!**
> JOHN BUCKLEY

already dead, since we'd recorded the key presses before the change."

Buckley agrees, "I never saw it as difficult. Having said that, I tried it on an emulator a few years back and couldn't play it! We saw it as a game that looked like small children could play, but really it was for the adults! Backup battery would have made the game easier, and during development we were assured we'd have it, but it was dropped due to cost. We tried our best with the 'Plokontinues' [players could earn]." As for why the team didn't go with passwords once the battery backup was cut, in an online interview Ste says they considered passwords, but decided against it since magazines would print them and anyone could skip to the last level.

Buckley adds, with a laugh, "I remember [producer] Rick Kay popping in to see it on a regular basis and he once said: 'Every week I see this there's a different level!' He seemed very excited until I pointed out we had another 32 levels to go."

Skilled players able to reach the end will discover perhaps the game's only true flaw: apart from a ▶

LITTLEBIGPLANET
▶ Another British-made classic, we can't help feel there's a similarity in how Sackboy handles. Both platformers have a physics system, distinct from others in the genre. Both also show a love for textiles. Finally, comedian Stephen Fry narrated *LBP*, while Ste Pickford revealed on Twitter: "When doing *Plok*, before the SNES it was going to be a coin-op. We got Chris Sievey (Frank Sidebottom) to agree to do the voice of Plok. A shame it never happened."

THE GETAWAY
▶ "I owe much of my later successes to those early days, learning from so many industry heroes," says Chun Wah Kong. So while not an obvious example, Chun's role as lead designer on *The Getaway* was shaped by *Plok*. "QA is great grounding for designers. It makes you think critically about how players approach your level; how to reward curiosity if the player wanders off the beaten track; how different approaches could break the game. It makes your game more watertight."

THE MAKING OF: PLOK

PLOK GETS PRINTED
BOTH STE AND JOHN PICKFORD COMMENT ON THE AWESOME PLOK COMICS THEY'VE BEEN MAKING

Ste: "We were getting requests for a *Plok* sequel, or re-release of the SNES game. We were a bit surprised, but for various reasons weren't in a position to make a sequel or re-release. Rather than just apologising on Twitter all day we decided to do something within our capabilities and started a comic strip. Also, we were making games that were taking us a long time to complete, and were going for long periods – years – without releasing anything. Putting out a comic was a way of releasing something on a more regular basis."

John: "It's just great fun. Back when we made the game we didn't really consider the story much beyond giving Plok a reason to finish levels. Much like Mario and his missing princesses, the story's only purpose is to set the scene and motivation for the gameplay. With the comic we're having fun treating that original story as canon and coming up with daft ways it can all fit together with new plots, characters and a more fleshed-out universe. Basically, we're pretending we knew all this back in 1993, or earlier if you count the coin-op prototype. It's all tongue-in-cheek. We've definitely used the comic to comment on the industry but I think we're gradually moving away from that as the stories evolve. Ha! That sounds so pretentious for a daft comic we make in our spare time. Maybe we should try something outrageous?"

ORIGINAL SNES SOUNDTRACK
Tim Follin and Geoff Follin

MUSIC TO PLOK TO

THE STORY BEHIND THE PLOK LP

Regular readers will know that, usually, when a large company publishes a game by a small developer, they grab all of the rights – meaning that years down the line it's the publisher not the creators themselves who benefit from merchandising. Usually, but as Tim Follin reveals, "I don't hold the rights to anything I did back then. I'm resigned to it, but such is life. Fortunately, *Plok*'s IP rights are held by Ste and John, which they were clever enough to secure at the time!"

This business acumen means the brothers are able to deal directly with Respawned Records, which explains, "We approached Ste Pickford with the idea of a vinyl soundtrack and he was all for it! Ste and John are passionate about *Plok* and insisted on redoing all the artwork. Tim Follin is an incredibly talented man and his amazingly fun soundtrack is something we're excited to present on vinyl!"

"I'm involved in overseeing a vinyl and cassette re-recording of the music," adds Tim Follin, who benefits directly from the deal. "They've been mastered by Alberto Gonzalez, a fellow games composer, who is much better at doing these things. Ste is splitting royalties between us and he's doing the cover art."

It warms our hearts to see artists being rewarded for their work. Preorders will be available on 18 April and anyone interested should visit respawnedrecords.com for more information.

TRACK LISTING:

01 Plok's Theme	02 Wandering Soul
03 Cotton Island	04 A Line In The Sand
05 Catching Fleas	06 Back Home
07 Legacy Island	08 Going Underground
09 On The Rocks	10 The Fleapit
11 Boss Theme	12 Race Against Time!
13 Uni Jet Theme	14 Flame Thrower Theme
15 Cowboy Theme	16 Blunderbuss Theme
17 Boxing Theme	18 Run It Up The Flagpole And See If Anyone Salutes
19 Diggin' It	20 The Gift

» An original sketch of Acrylic and the surrounding islands.

> "Much of game design is about making sure features don't conflict, break, or unbalance the game"
> **STE PICKFORD**

few bonus levels and a succession of one-time occurrences in the last Fleapit area, most of the game's touted vehicles appear nowhere else. The truck, motorbike, jet pack, helicopter, tank, UFO and spring boots don't feature as prominently as they could have. It ends and you're left feeling that, having created these vehicles, relegating them to the last stages seems a bit wasteful.

Lyndon describes these power-ups, "It was always the intention to feature costumes as power-ups and have a different vehicle on each Fleapit level. From what I remember, the helicopter was carried over from the original design while the other vehicles came out of level-design meetings. We were aiming for a wide range of manoeuvrability and firepower."

"The transformations happened as we saw a need for them," adds Buckley. "They provided new gameplay features at various points. All four of us – John, Ste, Lyndon, and me – had input. When the bonus levels were conceived we went back to certain levels to introduce them as shortcuts for the more seasoned player. For example, going left on the very first level."

We ask Buckley if anything had to be cut from the game. "Just a few levels I think," he reveals. "All the costumes and vehicles were included."

If you browse the online portfolio of *Plok* vehicle sketches, however, Ste explains why they were seldom seen, "Much of game design is about making sure features don't conflict, break or unbalance the game. Limiting where a feature can be used is a great, easy way to avoid the balancing process."

Special mention must also go to the fantastic music, by Geoff and Tim Follin, which accompanied players on their challenging journey. Fans have noticed the title screen music sounds reminiscent of the classic *Tequila Song* by The Champs. "This was part inspiration and part coincidence," Tim explains. "We'd filled the sample memory, so [for title music] I was trying to write something using the samples we had. I must have heard the *Tequila* track on the radio or somewhere and realised the two chords next to each

» [SNES] This cowboy suit, complete with little toy pop-gun, is useless and a bit of a trap. Try not to grab it.

» [SNES] Remember in the first *Rambo* film, where Sly Stallone cries about his friend whose legs he couldn't find? He was referring to this level in *Plok*.

» [SNES] Rockyfella shoots a stream of rocks at Plok. There is nothing suggestive about the shape of him or method of attack...

» [SNES] The final levels within the Fleapit feature all of *Plok*'s vehicles. Ste has said isolating them in this way reduced the work of balancing them.

other could be done with two samples. I got it small enough to fit into memory and it worked! I had few lead instruments so tried to think of really small samples I could squeeze in and came up with the harmonica sound, which has a sample literally a waveform long. I think it was BB King I heard playing on his Les Paul guitar and realised the sound was a spectrum 'click' at the start of the note then something not far off a square wave, which meant it would be a tiny sample. The rest is manipulating samples to sound like they're being played – the harmonica uses two channels to give two notes at once and the guitar was about cutting it off to mimic someone playing. *Tequila* was an inspiration, but I'd never have arrived there without those very specific technical limitations."

Originally, the plan had been for Nintendo to publish *Plok*, which is how Shigeru Miyamoto came to describe it as the third-best platformer. According to Lyndon, "We demoed *Plok* to lots of potential publishers during development. Nintendo Of America showed a lot of interest and visited the studio more

than once. In fact, Tony Harman played the game less than four weeks after development began!" Sadly, this fell through and Tradewest published it in America, Activision in Japan, while Nintendo Europe sublicensed it from Tradewest for publishing in Europe (and botched the job with nonsensical advertising). Magazines around the world gave it positive reviews, with *Super Play* awarding the game 90%. Unfortunately, this was right at the time when a glut of mediocre platformers flooded the market, meaning a lot of players chose not to discover *Plok*'s strong originality.

John Pickford comments on this fact when we ask about the *Plok* comic. "There's obviously our disappointment *Plok* wasn't a mega-hit, which we've transposed to Plok himself," he says. "But we're many years over all that and it's something funny to play with – making Plok bitter about 'Blubsy The Blobcat' and so on."

Work on a Mega Drive port was started, with some maps imported and Plok controllable, but it was soon abandoned. "The Mega Drive version was

being ported by Ste Tatlock, I think," Buckley explains. "What I saw of it looked very good; I even saw some Mode 7 rotating stuff being interpreted. I have no idea why it was cancelled. The SNES version was already done by then, I was doing language conversions when it was started."

Which is where the *Plok* legacy ended, at least for a time. In 2013, some 20 years after the game's release, the Pickford brothers resurrected the character for a weekly web comic, which is still going strong, while more recently there's been a vinyl soundtrack release (see boxouts). The brothers fortuitously still retain all creative rights.

We give Ste the final word. "We'd like to do a new *Plok*," he says. "We've experimented with a prototype of a new game, starring Plok, and have it pretty well designed, but we've had to put that on hold in favour of paying work. The new *Plok* game idea is not a sequel in the sense of it being another platformer. It's more like a videogame adaptation of the comic, and a mash-up of different gameplay ideas we've been developing since we went indie." ✹

Time Gal

» **PLATFORM:** MEGA-CD » **RELEASED:** 1992 » **DEVELOPER:** WOLFTEAM

You're a proud owner of the brand-new Mega-CD, but you can't yet *say* you're a proud owner. After all, you spent a lot of money on the machine, and as good as *Sol-Feace* was, you couldn't help but feel it was a cartridge game with a fancy soundtrack. Looking around for something more impressive, you decide to pick up one of those full-motion videogames you've heard about – but with *Night Trap* out of stock, you go for *Time Gal* as it looks a little like the 'Manga Video thing' your friend showed you.

You start the game not knowing quite what to expect, and your hero materiaises into the middle of a Roman colosseum. As she duels with a gladiator, she starts throwing out some taunts – "Hey good looking, you're mine!" and the like. It's not exactly the peak of sophistication, but in a few seconds she's already demonstrated more actual personality than any cartoon animal platform star. Time to get your mate round and show off a bit. ✱

BIO

Originally released as a LaserDisc arcade game in Japan during 1985, *Time Gal* came to the attention of western audiences as one of the early FMV games to hit the market during the lifetime of the Mega-CD. The game was moderately well-received for its novelty at the time, though some reviewers were already growing weary of the simple formula. Still, that didn't stop the game appearing elsewhere – versions for Mac, LaserActive, PlayStation and Saturn followed later in the Nineties, and the game was revived for the mobile phone market on iOS and Android in 2017. Most of these versions were for the Japanese market only.

8500

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MORE CLASSIC TIME GAL MOMENTS

Ice-capades

BC 1600 is the setting for one of *Time Gal's* most impressive sequences, in which a woolly mammoth crashes through the ice and chases Reika across the frozen wastes. If you're successful, she manages to swing up onto its back and plunge it into the depths below, making for a brief but very exciting scene.

Deadly Premonition

When you warp to 1991, you find yourself dropped into the middle of a battlefield, a barren desert environment filled with tanks and choppers. While it's hard to say a war in the Middle East was wholly unpredictable, it's quite surprising that the developers nailed the date of the Gulf War six years in advance.

Who Ya Gonna Call?

When you arrive in a certain time period, Reika quickly finds herself under attack by a supernatural being with an enormous scythe. In Japan, this spectral foe is encountered in AD 666, but cultural sensitivities place it at AD 999 over here – which is at least an appropriate number for this emergency situation.

Chibi Splat

Of course, any FMV reaction test needs some good death sequences to keep things entertaining, and *Time Gal* delivers on that front. A super-deformed Reika adds another layer of cartoonish levity to proceedings as she smashes into walls, gets squashed underfoot or just simply drowns.
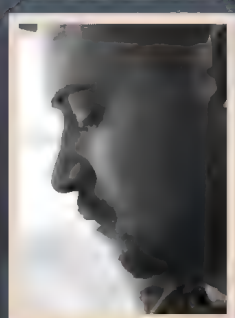
THE LEGACY OF
MYST

Cyan's landmark puzzle-packed adventure game was a runaway success when it debuted in 1993 and helped usher in the CD-ROM format. Co-creator Rand Miller examines the wider impact of his Mac and PC classic, and we chat to the developers of the games that were directly inspired by it

Words by David Jesudason

Lori Nichols
Timelapse's designer

Mark Hamilton
The Room's codesigner

Knut Mueller
RHEM's creator

"Time passes and things fade," begins Rand Miller, who is trying to comprehend the legacy of *Myst*, the game he co-created with his brother Robyn way back in 1993. "But we, now as much as ever, are getting people who are saying how much it influenced them."

Retro Gamer readers will be familiar with how *Myst*'s cerebral gameplay enabled it to became one of the most successful titles ever and how it took nine years for *The Sims* to overtake its six million sales in 2002. It was one of the first adventure games to dispense with text commands, instead using photorealistic images to give the player the impression that they were viewing the world through their character's eyes. It helped spark a golden age of CD-ROM home gaming, alongside trailblazing titles, such as *The 7th Guest* and *Star Wars: X-Wing* and *Rebel Assault*. Most of all, *Myst* attracted a new audience which was drawn

to a visually stunning first-person adventure that offered a different playing experience to shooters and sports simulations.

But as Rand points out, now, more than ever, is an ideal time to look at its legacy as gamers have spent the proceeding decades engrossed by a diverse list of titles *Myst* helped spawn. We are now well-placed to look at how the game's fanbase has been served with graphical puzzle adventures in the 27 years since *Myst* was released by Cyan.

"To this day, there are a lot of people who game in very specific indie categories," Rand adds. "Maybe because of *Myst* they don't play mainstream games, but they are just interested in unique visions."

Myst attracted numerous developers to computer design who wanted to create games that offered a similar mix of mystery and non-violent escapism. They decided to make games that were like *Myst* because they themselves ▶

MYST's RE-MIXED BAG

After the game's unprecedented success three new versions were produced in the proceeding years, updating the original's graphics, story and control system

■ *Myst* was created using Hypercard, which was a basic Macintosh application described by Rand as a program that allowed you to present information using a "computerised stack of cards". It meant that *Myst's* game engine was effectively a 2D point-and-click slideshow of static images, albeit one interspersed by ground-breaking full-motion videos and clever puzzles.

Later versions sought to improve the visuals and then modernise the control system. In *Masterpiece Edition*, released May 2000 on PC CD-ROM, the upgrade is from 8-bit colour to 24-bit, the sound is improved, but it remains a static 2D game.

The really radical reboot, however, came later that year with *realMyst-Interactive 3D Edition*, which included a free-roam mode that allowed first-person movement similar to games like *Quake*. It was user-friendly in other ways too, as it added interaction guides, such as arrows to switches, torches that could illuminate darkened areas and fonts that made letters easier to read. Graphically, it was a mesmerising itineration, with this version including atmospheric sunsets, sunrises and storms. Disappointingly, it was an ambitious failure that ran poorly on the computers of the time. It also angered some diehard fans by changing plots and including a new age, Rime. Robyn was particularly grumpy about it, calling it a "lapse" and a merchandising of the original game.

The bugs and niggles were eventually fixed in *realMyst: Masterpiece Edition* in 2015, and despite the controversy this update shows how incredible the original images of the game were as they adapted smoothly to a rich 3D overhaul.

» [PC] The rocketship puzzle is one of the many tricky ones to crack as it involves matching notes on a keyboard to levers.

"I BELIEVE IT WAS THE GOLDEN AGE OF GRAPHICAL ADVENTURE GAMES, AND I WAS GLAD TO BE A PART OF IT"

Lori Nichols

▶ were fans and had, as Rand puts it, "unique visions" for graphical adventures. One of these designers was Lori Nichols, who came from a CGI background, which included working as a background assistant on the original *Tron* movie. She conceived the time-travelling adventure title *Timelapse* in 1996 after being shown *Myst* by Ed Deren, who worked with her on the GTE Interactive Windows and Mac game as a designer. "First-person shooters always made me dizzy and were too fast-paced," she says. "*Myst* was a new approach to gameplay that felt like magic to me. *Myst* was a great mix of thoughtful, logical puzzles, that often built on something you did or had seen before. I loved the clues, too. It was so interesting to see how the game designers used subtle audio and visual clues to guide the player. However, I confess, I did buy the cheat book!

"*Myst* inspired *Timelapse* because it proved that a game could be both beautiful and intriguing, and that the state of computer graphics and game technology had reached a level that was now feasible to create highly ray-traced and visually stunning interactive environments in an adventure game format," Lori continues. "I believe it was the golden age of graphical adventure games, and I was glad to be a part of it."

*Timelapse* had almost a complete checklist of obvious *Myst* influences: an unnamed player; navigating mysterious islands (which starts at Easter Island and includes Atlantis); settings that appear to be deserted and still-framed graphics. But what made *Timelapse* an intriguing gaming experience was its broader, more erudite characteristics. While Rand was inspired by Jules Verne's *The Mysterious Island* when creating *Myst*, *Timelapse* drew on a huge amount of research that Lori undertook on ancient civilizations, such as Egyptians, Mayans and the Anasazi, as well as literature that included Philip K Dick and Plato. These historic settings are beautifully rendered in *Timelapse*, and when judged alongside *Myst's* game world adds weight to Lori's argument about the Nineties being a 'golden age' for the point-and-click adventure genre.

As well as demonstrating that a game could be influenced by literature, *Myst's* popularity showed that the public had an appetite for puzzles in the days before hints and cheats could be sought quickly on the internet. *Timelapse* built on this by creating complex problems that could be solved without frustrating the gamer, an issue that some did encounter with *Myst*. In fact, *Timelapse* was able to improve this formula by holding focus groups to see what fans of Cyan's bestseller would have liked in order to help them play the game more intuitively.

The research, Lori reveals, yielded two improvements that found their way into
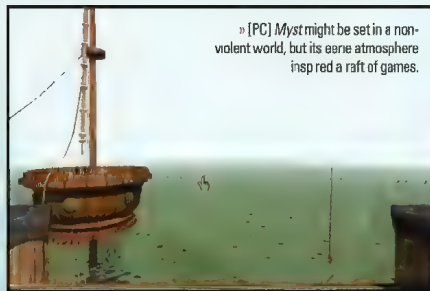
» [PC] Myst might be set in a non-violent world, but its eerie atmosphere inspired a raft of games.
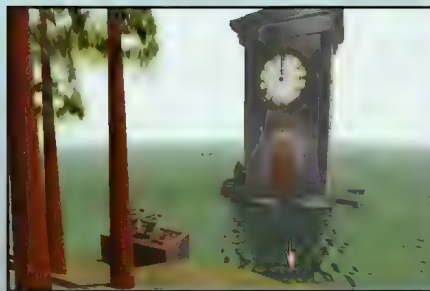
» [PC] Arguably, Myst is one of the first walking simulators as you wander around the island at your own pace.

» [PC] realMyst was an updated version of the original game that improved the graphics and control system.

Timelapse which players took to and helped it earn acclaimed reviews. Firstly, a camera allowed gamers to take a screengrab so that they did not have to write down notes to help them solve puzzles. Secondly, Myst players had felt that the game was "devoid of life", and to counter this more animation was added throughout Timelapse.

"We wanted to take it a step further than Myst," adds Lori. "We did this by creating very realistic, diverse high-resolution environments and using a technique for visually travelling through these worlds that utilised more frames in the segments, making it feel more natural to the game player."

Another game that owes its entire conception to Myst is Got Game Entertainment's RHEM, which was created by Knut Muller in 2003 for Mac and PC. Knut, like Lori, was originally from a non-gaming background – in his case art and music composition – and similarly was drawn to computer design after playing Myst.

RHEM, like Myst and Timelapse, used static images (made using Bryce 3D and Photoshop) to create an immersive experience which was navigated using a point-and-click technique. Its post-industrial setting – Knut drew on his home town of Leipzig – was far removed from most people's everyday locations, and offered a similar escapist experience as the worlds of Myst and Timelapse did.

"Myst inspired me in a fundamental way," Knut says. "Before Myst I was not really interested in computer games. Myst is a game in a philosophical sense, not in a competition sense. Exploring an unknown world by solving the embedded puzzles is also a way to see the 'real world'. If you see your life and your world as an exploration or expedition, you may like Myst, but if you want to see your life and your world as a competition or a 'struggle for life', you may not."

The puzzles Knut crafted are a lot more difficult to solve than Myst and RHEM has gained a cult following among graphical adventure fans, leading to the creation of three sequels: The Cave, The Secret Library and The Golden Fragments. There's even a band of RHEM devotees who maintain that it is a superior game to Myst.

"I liked the puzzles in Myst because they were logical and you never made uneducated guesses," Knut tells us. "The puzzles 'trained' different areas of the player's psychological activity, such as mindfulness, patience and thinking outside the box."

Knut, who is an accomplished painter and musical composer, was aged 35 when he made RHEM. The first experience he had of playing adventure games was the Macintosh's Das Tor Der Minerva, which he found out was inspired by Myst. He realised both games offered a

playing experience that nowadays we would deem as 'mindful'. "Mindfulness is one of the qualities I wanted to inspire in people who play RHEM. RHEM has a relaxed mood because there is no time pressure and there are no time-related puzzles," he says.

Both RHEM and Timelapse served an audience that enjoyed Myst and wanted a similar challenge to what the Millers' game, and its sequels, offered. This is the demographic that may have also loved other 'golden age' graphical adventures, such as Return To Zork and The 7th Guest. But after the Nineties there would have been millions of new computer and console users who were too young to have played Myst. However, Myst's influence on games did not die at this point, and you can see its impact on all types of games, especially in the walking simulator genre. Decades later, titles such as Firewatch and Dear Esther offered a Myst-like nonlinear playing experience that showed there still was an appetite for exploration of exotic game worlds.

But which games made in the past decade were designed by people who were Myst fans or wanted to recreate the tone of its gameplay to a new audience? The Room by British developer Fireproof Games owes a lot to Myst. Created in 2012 for mobile devices and then ported to Steam, it's an experience which seems at first very slight as it's set in one room where you ▶
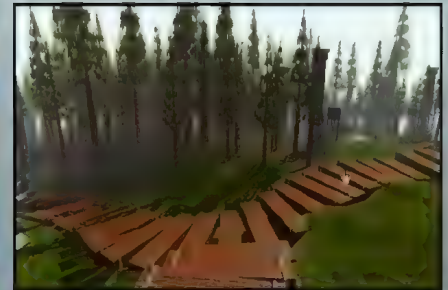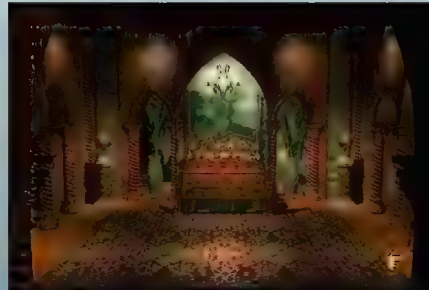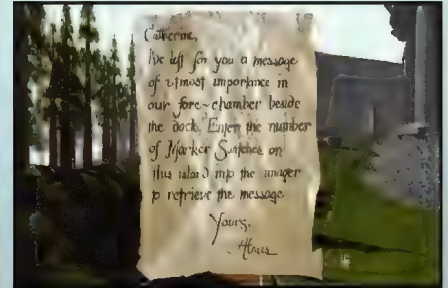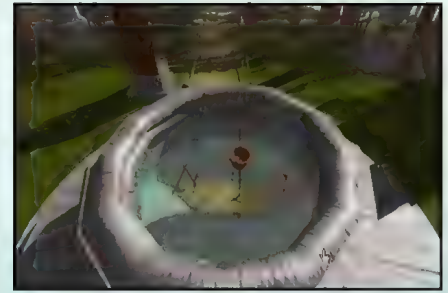
[...] keys to open puzzle [...] using keys. Fcm [...] is beautiful though, as the [...] *Myst*, it gradually becomes apparent there is a reason that the player is in this claustrophobic environment, and details of the storyline are fed to the gamer in a tantalising 'drip-drip' fashion. *The Room* does this by cleverly using notes which at first act as a tutorial, but then start to describe an element, called Null, and then depict its author AS's decent into madness. As the game progresses AS's notes become more unhinged and the experience is totally unsettling especially when the player appears to hallucinate. It's *Myst* on a bad trip. (Albeit a psychedelic journey that is navigated soberly using sensitive and user-friendly touchscreen controls.)

But *The Room*'s most outstanding element is the difficulty of its puzzles which seem to deftly match the player's fluctuating competence. Like the game's mysterious setting, this intuitive progression is also heavily indebted to *Myst*. "When we started, I had never designed a puzzle before so I played and watched walkthroughs for a ton of puzzle and adventure games to become familiar with how these games worked," says lead creative of *The Room*, Mark Hamilton.

"There was a particular walkthrough of *Myst* that I watched where the guy had finished the game years ago, but never played it since. The fact that he had a distant memory of the puzzles allowed him to play through the whole thing without really getting stuck. It was really interesting to me as it made a game that is notorious for being obtuse and tricky, flow really nicely: he always had a vague idea of what to do next. "I wanted *The Room* to flow like that – you

should always kind of know what you need to do," he explains. "Like it's always on the tip of your tongue."

Mark played graphic adventures growing up, and was particularly taken by *Myst* contemporary *The Labyrinth Of Time*, produced in 1993 by Bradley Schenck and Michal Todorovic for the PC, which he found an unsettling experience and admitted that its corridors are "ingrained in his psyche". Like in *Timelapse*, a lot of scholarly research was done in areas not normally associated with games.

"A lot of the inspiration for the puzzles came from giving each level a strong theme," Mark says. "We generally did a bunch of research, visited museums and poured through books collecting as many interesting objects, mechanisms, and devices that fitted the theme as we can then see how they can all be pieced together into a set of puzzles."

The Room was likely downloaded by many phone users who were looking for a quick puzzle fix for their commute, and were totally unaware of *Myst* and how it influenced what they were playing. But one recent game that was very open about how *Myst* helped shape its gameplay and setting was 2016's *The Witness*, published by Thekla for PC, PS4, then other consoles and iOS a year later. *The Witness* possessed numerous recurring elements mentioned before (the abandoned mysterious island setting; an unnamed player who has to piece together the narrative; nonlinear puzzle solving), but it also was one of the richest graphical adventure games ever created.

The island featured in *The Witness* was a world that had many meticulously detailed

[...], and as before, revealed the ruins and forts, alongside beautifully realised trees, mountains, land and seascapes. This setting may have highly accomplished artistry but, crucially, every detail depicted is firmly rooted in the real world. Amazingly there was no art director carving out a single vision, but instead Orsi Spanyol, Luis Antonio (formerly of Rockstar London) and Eric Anderson worked collaboratively with lead designer Jonathan Blow.

Eric was a veteran of this style of graphical cerebral adventure game, as he had been at Cyan since 2000 and worked on *Myst 5* and *Myst Online*, but he found that the process used to design *The Witness* was 'revolutionary' in its detail and realism.

"We worked with landscape artists and architects," Eric tells us. "I built the temple in the desert, and it was based on actual Egyptian and Mesoamerican structures. [We recreated] the way the structures would have been built by ancient people, how the beams would have been constructed and how it would hold itself up against gravity and how it would fall apart.

"For me it was a revolutionary way of working," he continues. "I found it far easier to look at the real world and then distil it into a game, because I find it much harder to do fantasy stuff for games and then expect players to respond in the way you want."

Because of the striking locations, the developers of *The Witness* were unafraid to separate the 650 puzzles from the natural environment, as the maze panels gave it a sharp modernist contrast and, unlike in *Myst* or the *Myst*-style games mentioned, they are easily

MYST ALIKES

MYST FANS ARE WELL SERVED WITH A RAFT OF GAMES THAT OFFER A SIMILAR UNSETTLING ADVENTURE.
HERE ARE FIVE TITLES THAT PICK UP WHERE THE CLASSIC CYAN TITLE LEFT OFF

QUERN – UNDYING THOUGHTS 2016

■ Good things come in threes, and 2016 was no exception for *Myst* fans. *Obduction*, *The Witness* and *Quern – Undying Thoughts* were all released that year. The latter showed its *Myst* influences from the very beginning of the game, teleporting the player to a mysterious island where puzzles involve gears and mechanical contraptions.
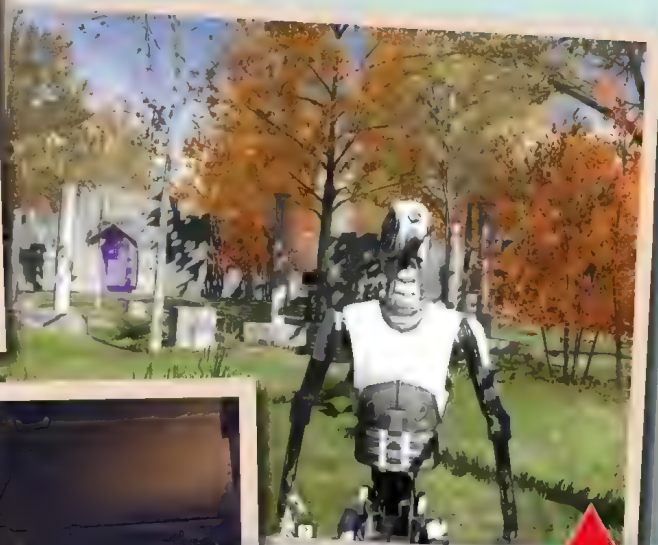
THE TALOS PRINCIPLE 2014

■ This game may have been made by the team behind shooter series *Serious Sam*, and you control a robot, but it is actually a meditative puzzle-solving adventure title. *Myst* fans will particularly enjoy *The Talos Principle*'s philosophical musings and being asked at points in the game what nature of consciousness you believe in.

ETHER ONE 2014

■ Reconstructing memories is a common theme in *Myst*-likes, and here White Paper Games takes this one logical step further. In *Ether One* you solve puzzles by investigating the thoughts of a 69-year-old woman with dementia who lives in the town of Pinwheel. The immersive atmosphere will be familiar, too.

LAKE RIDDEN 2017

■ Imagine *Myst* as a retro *Stranger Things*-style horror game, and you arrive at Lake Ridden. A common theme in *Myst* games is piecing the narrative together, and here you do this through discovering scraps of journals and notebooks. It's set in spooky 1988 Maine, à la Stephen King, but there's still tons of puzzles to solve and riddles to decode.

DEAR ESTHER 2012

■ It's debatable whether walking simulators were inspired by the Millers or by more conventional games such as *Quake*, but scratch beneath the surface of *Dear Esther* and you find elements of *Myst*. It has the island, forgotten artefacts and a plot told through an internal monologue of letters.
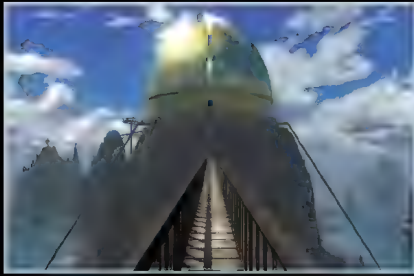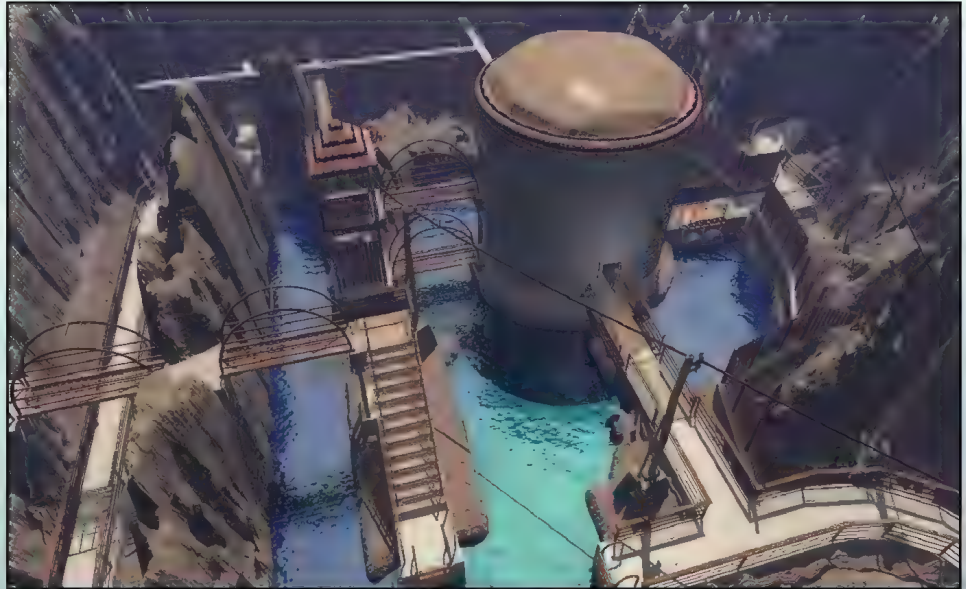
MYST
REBOOTS

After the runaway success of Myst, it was inevitable that a series of sequels would be made, especially as computers became more powerful

■ "*Myst* gave us creative freedom for *Riven*," Rand Miller highlights. "We were able to do whatever we wanted to do. We took salaries that were fairly modest, and just put the company's money back into the new projects." Hearing this makes it no surprise to learn that sequel *Riven* was epic compared to *Myst*. Released in 1997 on five CDs, it improved on the original's visuals, and this time included actual inhabitants. Its puzzles were more coherent, although 80 per cent are said to have failed to complete them, and the videos of Rand and Robyn Miller look more professional, less basement-y. It was a bestseller, but commercially unsuccessful compared to its predecessor, and not as feted by fans.

2001's *Myst III: Exile* built on the now-*Star Wars*-like mythology of the first two games and was based ten years after the events of *Riven*. The music was not composed by Robyn, but by Jack Wall, who gave the game's six new worlds "their own voice" and did this by expanding the repertoire of instruments used – Robyn had used only one synthesiser for *Myst* and *Riven*. The puzzles had a different feel, and were more intuitively linked by themes, and unlike in the first two games they were easier to locate, their difficulty was less daunting to *Riven*'s, and the consequence of pulling levers etc was more apparent. The player's view could now be rotated 360 degrees, which was becoming common in first-person shooters: *Halo* was released in the same year as *Exile*, for example. The visuals were startling, with rendering of the environment making objects like leaves stand out, and for the first time the full-motion video blended seamlessly into the game.

All this made *Exile* the most cinematic of the three games, and it even featured actor Brad Dourif, who voiced Chucky in the *Child's Play* films and was in *One Flew Over The Cuckoo's Nest*. The series took an unprecedented turn in 2003 with *Uru: Ages Beyond Myst*, which was set in the modern times and seemingly went against the Millers' mantra of 'no deaths' – a character could fatally fall. It was a commercial flop (although has since gained a cult following), but was the first to include real-time rendering. *Myst IV: Revelation*, released the year after, perfected the real-time 3D graphics, which were mixed with prerendered video and felt like a direct sequel to *Exile* picking up from where that game ended. The uninhibited player movement was then perfected in *Myst V: End Of Ages* in 2005 the last in the series… except *Myst Online: Uru Live* was then launched two years later, adding a multiplayer component that was lacking in *Uru: Ages Beyond*. "We looked at it as an evolution," Rand adds. "We just experimented with trying to make these worlds a little more interesting."

» [PC] The Kickstarter-funded *Obduction* proved the Millers were still adept at crafting clever adventures.


» [PS4] *The Witness* was critically well-received and has a 87% Metacritic score on PC and PS4.

MAYAN WORLD

RAINFOREST

OBSERVATORY

BEACH

WARRIOR
TEMPLE

CLIFFS

SACRIFICAL POOL

TEMPLE OF
INSCRIPTIONS

CAVE
BEACH

TEMPLE OF THE SUN

OCEAN

MYST V
TIMELAPSE

The debate about the best Myst-like will never be definitively answered, but Timelapse has a lot of admirers

■ Rick Barba, the author of the Prima Games *Timelapse* strategy guide, writes: "Yes, [that] first impression is correct – *Timelapse* was inspired by *Myst*. But no doubt your second impression was the same as mine: this game takes the genre established by *Myst* to fabulous new heights. Traversing the *Timelapse* universe, you can't help but admire the integrity of the product, the remarkable attention to detail in all phases of design – art and animation, music and sound, puzzle design and gameplay, writing and story. Clearly, *Timelapse* was rendered by loving hands."
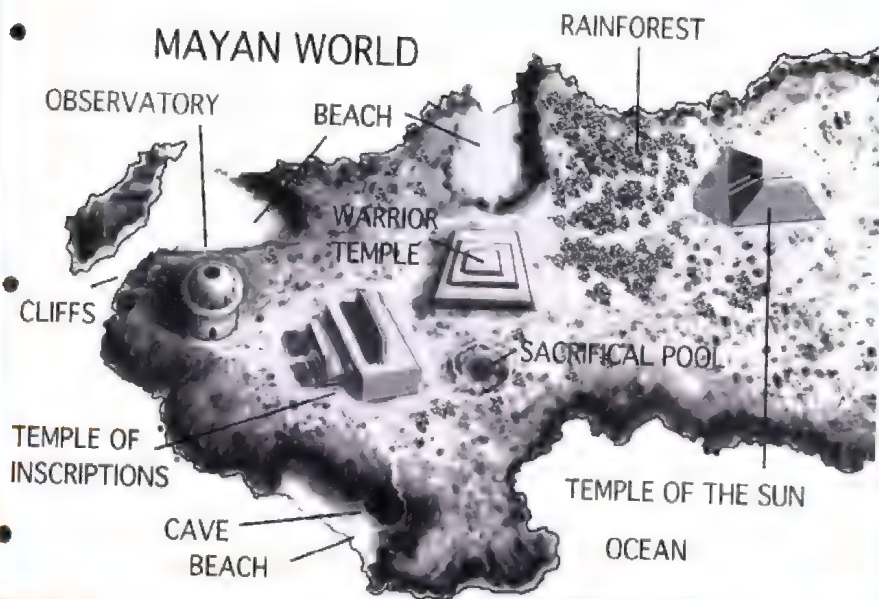
found by the player, which made the gameplay more fluid. "Very rarely would you walk up to a panel, and you were confused as to how you would interact with it," Eric highlights. "That is a big deviation from *Myst*. One of the big complaints of *Myst* was that some of the screens were a pixel hunt: you didn't know which parts of the screen were interactive and which parts weren't, and I know that was one thing that Jonathan [Blow] tried to very consciously stay away from, and that's why the art style ended up looking the way that it did."

Knowing that a lot of the environment in *The Witness* isn't a puzzle allows a player to explore the island in a similar way to a walking simulator. This cleverly helps with the puzzle-solving element, as when a player is wandering around in *The Witness* they can use this time to think about how to solve the panels. Another departure from other *Myst*-style games is how the terminals eventually connect to form a narrative, as shown in the first instance when enough grids are solved that beams of light are shot up into the island's tallest mountain.

All these elements made *The Witness* an epic gaming experience that sold 100,000 copies in its first week of release. This blockbuster success is comparable to the popularity of *Myst*, which sold millions of copies when Rand said he would have been happy with a fraction of that. Eric believes that two factors made *The Witness* so popular: its original look, with its meticulously created structures, and its meditative *Myst*-like gameplay.

"*Myst* did a very good job in opening up this type of game to people who had never played games before," he says. "Rand would be the first to say it was a matter of very good timing. It drove CD-ROM sales and vice versa: people got that game whether they wanted it or not because of packaging deals. It taught a whole bunch of people who never thought of

themselves as gamers that they could enjoy this type of media.

"By the time *The Witness* came out I don't think it was tapping into that same kind of situation," Eric continues. "But I do think it benefitted from people who had played *Myst* and enjoyed that kind of solitary play-at-your-own-pace gameplay."

The year of *The Witness* release was to be a memorable one for *Myst*-likes as well because sci-fi adventure *Obduction* was launched after a Kickstarter campaign raised over $1 million from fans clamouring for more Cyan graphical adventures. *Obduction* is a bit like *Myst* in space, but also has a lot of the exploration elements that made *The Witness* so groundbreaking. It also brought the 'band back together' as Robyn Miller returned to compose the soundtrack and appear in the live-action sequences, like in previous *Myst* games. Eric, who went back to Cyan before *The Witness* was finished to work on *Obduction*, describes it as a spiritual successor to *Myst*, but one that almost became a space shooter like *Halo*.

"In the end we wanted to do something in the spirit of a Cyan game that the fans would line up and fund," he says. "With a modern style and a modern game engine. Better graphics and more interactivity. Rand was a big proponent of VR from the very beginning. And that became a big selling point."

Obduction also offered players little assistance when it comes to puzzle-solving and demands huge powers of observation to progress in the game. In this it is the most *Myst* of all the *Myst*-likes. It's also the work Rand seems proudest of, because it showed this difficulty is exactly what his fanbase wanted, even though a lot of time had passed since *Myst* was released.

"We knew from the beginning with *Obduction* we wouldn't have the budget like

was so satisfying to be able to be funded by enthusiasts who still appreciated something new from us. [From 1989 adventure game *The Manhole*] each game we made kind of brought money in to allow us to do the next game. We just kept the money and it pulled us up by the boot straps. I still am just as excited about what's going on – which is weird. I've been doing this a long time, who knew I could do computer games for this long?"

It shows that, unlike any other game created, *Myst* inspires so much loyalty that fans – devotees who have been well-served with numerous sequels and the likes of *Obduction* – will still fund another title in a similar vein. The clamour for *Myst*-style games must be limitless despite the intervening years, and it's an allegiance that Rand finds humbling.

We ask *Myst*'s co-creator to sum up how he feels about this legacy, and he replies: "When we started *Myst* we realised we were doing it for an older audience, but our roots were whimsical worlds for children, like *The Manhole*," he replies.

"I don't think we planned any of this. It was just experiments. You have people who are on vacation and they see something that reminds them of *Myst*. It's so satisfying that something so small had such an influence on people."

Perhaps *Myst*'s real legacy isn't the many games it helped to inspire, but the way it changed everyone who spent hours wandering around its abandoned island. It's no surprise that people on holiday, as Rand says, found buildings that reminded them of the game as it embedded in so many of our psyches.

So much so that its very name has proved prophetic as, like mist, its impact is still omnipresent, inescapable and frequently altering how we see the world and influencing what we play. ✸

Yoshi's Story

IT'S NOT THE GAME IT USED TO BE

RETROREVIVAL

If you follow me on Twitter you'll know that I'm currently obsessed with the Nintendo 64. I always regretted selling my original machine back in 2000 when my daughter Emily was born, and I now lament the high prices that the games I used to own are currently selling for.

I did own a Japanese version of *Yoshi's Story* back in the day, but I never really played it much, because it felt so disappointingly average after experiencing *Yoshi's Island* on the SNES. Needless to say, it didn't make the list of N64 games I was compiling as I rebuilt my collection, I simply didn't see it as something worth seeking out. Alongside my purchasing of US NTSC N64 games, I've also been grabbing copies of *N64 Magazine* where I can, and a glowing review of Yoshi's N64 adventure made me reevaluate my opinion of Nintendo's sequel. I headed to eBay, found a mint US copy and quickly snapped it up.

I'm happy to admit I was wrong about *Yoshi's Story*. Granted, it's not a patch on *Yoshi's Island* but, in all honesty, it's a completely different type of experience. In fact, it's a fiendish score attack game wrapped up in the sickly sweet aesthetics of a cute platformer. A stage can't be completed until you've eaten 30 pieces of fruit, but you'll gain more points if you eat Yoshi's favourite choice (selected at the start) and amass even more if you can track down the 30 watermelons tucked away on each stage.

Those pesky melons are deviously placed and you'll have to use Yoshi's new sniffing ability to root some out. You'll also have to take to the skies, investigate pipes, kill a set amount of enemies or solve various tasks to obtain the rest, and it's certainly not easy. *Yoshi's Story* is often criticised for its brevity and while it's relatively easy to whisk through its six 'pages', unlocking all the secret stages and amassing those watermelons will take many more playthroughs. In short, it's not the game I thought it was, and it's taken me 23 years to realise that. ✱

DESTRUCTION DERBY

DESTRUCTION DERBY WAS A DRAMATIC SHOWCASE FOR THE POWER OF SONY'S PLAYSTATION AT ITS EUROPEAN LAUNCH, AND THE CRASHES ONLY GOT MORE SPECTACULAR AS THE SERIES WENT ON

WORDS BY LEWIS PACKWOOD

Martin Edmondson cofounded Reflections in 1984, and the studio was behind a string of classic home computer titles, including *Shadow Of The Beast*. Reflections was bought by GT Interactive in 1998, and Martin left the studio in 2004, a couple of years before it was acquired by Ubisoft.

"We certainly stuck around on Amiga for one game too many," muses Martin Edmondson, former head of Newcastle-based studio Reflections. He's talking, of course, about Reflections' ill-fated platformer *Brian The Lion*, which launched in 1994 just as the Amiga market was entering a death spiral. Mike Troughton, who joined the studio fresh out of university to work on *Brian*, recalls the team was wondering whether to make something for the SNES or Mega Drive when Psygnosis, their publisher, got in touch. "They said, 'Come up to our office in Liverpool and have a look at this,'" recalls Mike – and 'this' turned out to be the as-yet-unreleased Sony PlayStation.

Sony had bought Psygnosis in 1993, and the publisher was busy commissioning games to fill out the PlayStation's European launch line-up. "They asked us to pitch a project," says Mike, and he mentions that the Amiga games *Stunt Car Racer* and *Indianapolis 500* were big influences on what became *Destruction Derby*.

[PlayStation] A giant 3D 'GO!' spins over your car at the start of a race in *Destruction Derby*. This was the dawn of the 3D era, and the spinny letters are an advert for the power of the PlayStation.

The team used to enjoy causing massive pile-ups in office games of *Indy 500*, which Mike says led to the thought: "Could we just make that into a game, just smashing cars up?"

But Martin says that the idea for a game about destroying cars goes right back to his childhood. "When I was very young, my dad used to take me to real destruction derbies – they call it banger racing in the UK. I was fascinated with smashing cars from a very early age, so when the race was over, I used to jump over the wire and then just run up to all these cars, and I'd be underneath them and looking at all the damage and all the twisted metal. I was probably only seven or eight or something like that."

Not everyone at Psygnosis was on board with the idea to start with, however. "One or two people looked at it and said, 'Meh, it's just a racing game with crashing.'" remembers Martin. The initial pitch was simply a design document, so Martin says the team went back and made a demo to "win over the doubters", which ended up being a kind of firing range for cars. "So you'd sort of line up a bunch of cars and then fire this car into them and it would go smash, and all the physics

[PlayStation] Martin Edmondson says that Reflection had a lot of help from Sony in the lead up to the launch of the PlayStation. "We had lots of meetings with Sony: Sony's technical guys would come and see us, we went to see them."

Mike Troughton joined Reflections in the early Nineties, but left after *Destruction Derby 2* to co-establish Pitbull Syndicate, the studio behind *Test Drive 4*, *Test Drive 5* and *Test Drive 6*.

[PlayStation] Martin Edmondson says that piracy partly influenced Reflections' move away from the Amiga: "Piracy was a massive issue on the Amiga at the end, so it was just very difficult to justify continuing on the Amiga."

Robert Troughton left Reflections after Destruction Derby for a short stint at Scavenger in Liverpool, but returned to the northeast to cofound Pitbull Syndicate with his brother, Mike

were going off, all the bits were flying everywhere, and I was so addicted to it I went right through the night doing that, for no reason other than the pure pleasure of it. And that was the moment at which I thought this really, really works."

The demo sealed the deal, and the race was on to produce a game in time for the European PlayStation launch in September 1995 – only around nine months away. And not only was time in short supply, the Reflections team was working on a brand-new and unfamiliar platform. "It was quite a big leap to go from the Amiga to the PlayStation," Martin chuckles.

"We'd never written a 3D game before," recalls Mike. "I had some experience with doing 3D on the Amiga, but it was purely for demos, and it was all self-taught. I'd never read anything about 3D graphics, it was all just trying to figure out the maths."

As development began, Mike feverishly began to read up on how to use things like matrices and vectors to create 3D. Martin is full of praise for Mike for implementing the complex 3D physics of Destruction Derby: "Mike was a complete

ONE OR TWO PEOPLE LOOKED AT IT AND SAID, 'MEH, IT'S JUST A RACING GAME WITH CRASHING
MARTIN EDMONDSON

GAME ON!
WAYS TO TEAR UP THE TRACK

WRECKIN' RACING
The main mode in almost all the games sees you competing for podium positions as well as scoring points by spinning and wrecking competitors. So even if you finish second in a race, there's a still chance to steal the top spot if you've caused enough damage along the way.

DESTRUCTION DERBY
The Bowl in the original Destruction Derby was added at the last minute by Reflections, but it became one of the most memorable parts of the game. In the 'Destruction Derby' mode, 20 cars fight for survival in this circular arena, and later games added more elaborate stages as time went on.

CAPTURE THE FLAG
Making its debut in Destruction Derby 64, CTF was a two-on-two battle to nab your opponent's pennant and deliver it back to your base without getting wrecked. Four players can play in splitscreen, but with two players the computer takes control of your team's other car.

PASS DA BOMB
Bomb Tag turned up first in Destruction Derby 64, and it was reworked for Pass Da Bomb in Destruction Derby Raw. The idea is to offload the explosive that appears above your car by smashing into foes before the timer ticks down.

SKYSCRAPER
Destruction Derby Raw added battles on top of tall buildings that have an alarming lack of safety barriers. Battles naturally involve attempting to nudge your friends and/or enemies off the edge without tumbling into oblivion yourself.

ASSAULT
This fast-paced mode on a circular track sees you race in a team with an indestructible Humvee. The aim is to protect your Humvee and keep it in first place for as long as possible, at the same time as attacking the other teams' Humvees in order to knock them down the rankings.

SURVIVING DESTRUCTION

STAY ON THE TRACK WITH THESE KEY TIPS

USE YOUR BRAKES

This isn't *Mario Kart* – braking is essential to avoid banging into the sides of the narrow courses of the original *Destruction Derby*. Ricocheting off the sides will cause your engine to smoke out well before the end of the race, and there are some vicious turns to deal with on courses like Ocean Drive.

PROTECT YOUR RADIATOR

Damage to the rear and sides of your car will affect its handling and speed, even causing you to constantly veer to the left or right. But as long as the front of the car is intact, you can keep going. Avoid head-on collisions at all costs to make it to the end of the race.

GET INTO FIRST PLACE AND STAY THERE

Not as easy as it sounds, of course, but gaining an early lead makes things a whole lot easier. You'll encounter the odd back marker, but these are far easier to deal with than being stuck in the middle of the pack, constantly getting shunted from fore and aft.

SLOW DOWN FOR CROSSROADS

A couple of tracks feature crossroads that are utterly lethal. It's easy to get spun off course by cars approaching from the left or right, and you can end up being shunted down the wrong stretch of track entrey. Even if it means losing your position, it's better to slow down and cross carefully.

AIM FOR THE REAR CORNER TO SPIN OPPONENTS

You gain points by spinning other cars, and the safest way to do this is to pull alongside and gently nudge the left or right rear corner of the other car with your wing. Slamming into another car head on is a sure-fire way to knacker your radiator before the race is over.

GO BACKWARDS

The game will try to flip you around to driving forwards if you attempt to reverse on the main race tracks, but going backwards is a valid tactic on The Bowl arena. In fact, it's pretty much essential if your radiator is one hit away from smoky doom.

Speed 054 HPH

00 40 43

[PlayStation] In *Destruction Derby 2*, cars could now flip over completely, making for some fantastically satisfying crashes.

❝ MARTIN HAD COME UP WITH THIS IDEA THAT IT WOULD BE REALLY COOL TO SEE ALL THE CARS CRUNCHING TOGETHER IN THIS BIG ARENA ❞

MICHAEL TROUGHTON

genius mathematician. He was just a brilliant maths guy. But it was made easier by the fact that the machine itself was relatively easy to program. I specifically remember within a day of receiving the development kit we had a triangle on the screen that was spinning around. And then within a week, we had a very, very basic track with a couple of filled polygon cars just driving around it on rails."

Still, it didn't help that the manuals for the dev kits were entirely in Japanese. And Mike was aware that the "very clunky APIs" on the dev kits they received weren't letting them use the full power of the PlayStation. "We always suspected that other developers, like the *Ridge Racer* guys, maybe got more access to the hardware, because what they seemed to be doing was quite impressive."

By this point Mike's younger brother, Robert, had joined Reflections, and the core team had swelled to six, with Russ Lazzari, Will Musson, Mike and Robert on programming duties, Phil Baxter doing art, and Martin

Car Select

Pro
Acceleration ■■■■■
Top Speed ■■■■■
Grip ■

[PlayStation] As in the first game, players could choose between Rookie, Amateur or Pro cars in *Destruction Derby 2*. Later games expanded the selection of cars dramatically.

THE HISTORY OF DESTRUCTION DERBY

» [N64] Races in *Destruction Derby 64* quickly become absolute carnage as you encounter cars approaching in the opposite direction.

» [N64] The colours in *Destruction Derby 64* are much more vibrant than the pastel shades of the earlier PlayStation games.

» [N64] Up to four players can compete in multiplayer battles in *Destruction Derby 64*, facing off in matches of Bomb Tag or Capture The Flag

[PlayStation] The development of *Destruction Derby 2* was just as frantic, says Martin Edmondson: "It did end up being quite intense because of adding the extra detail, the extra stuff, more racing modes."

working on modelling. Robert recalls that the computationally intense crashes of *Destruction Derby* meant that they were constantly running up against the limitations of Sony's machine: "There were a lot of problems on the hardware side, just making sure that the machine could handle it. If you look at other games that were released at the time, and even for years afterwards, they just didn't have that many dynamic objects moving around. We had 20 of them." Still, the challenge made it fun, he says. "We kind of enjoyed how difficult it was: that made it more interesting in a way."

The nature of the game meant that licencing real cars was out of the question, says Robert. "Getting car manufacturers to agree that you can make [their] car look bad was hard at the time." Interestingly, however, Martin reveals that a real car did make it into the game, after a fashion – the humble Ford Granada. "I must have been to 50 to 100 actual banger races during the development of the game on the weekends," he says. "And what I did was run around the pits, photographing every single car from the front, the two sides and the rear. And then they'd all go out and race and come back, and then I'd run around and photograph the exact same cars where possible, showing increased damage. It took that many photographs to be able to acquire a progression on one particular car that went from no damage to a little bit of damage, a bit more damage, then a bit more damage, because it just didn't happen very often. So [the textures in the game] were almost untouched photographs of a progression of damage of a Ford Granada taken from probably 100 Ford Granadas over maybe 80 races."

Considering Martin's dedication to UK banger racing, you may be wondering why *Destruction Derby* is set in the USA. Well it's all about the razzmatazz, he says. "The American

angle was to try and sort of glamorise it a bit, because if you've ever been to a banger race in the United Kingdom, you'll know it's pretty down-and-dirty stuff. Whereas in the US the way that they do NASCAR and IndyCar, it really puts our motorsport to shame in terms of the ceremony of it all."

With such a short timeframe for development, work on *Destruction Derby* was intense. Mike remembers working overtime almost from the start, and Martin says development went on "pretty much seven days a week". Inevitably, in the rush to complete the game, cuts had to be made. *Destruction Derby* was originally meant to have a track editor, but Martin says that got ditched late in development. "It wasn't getting it finished – we got it finished – it was getting it bug tested. If you imagine you're allowing people to do anything with a track, the number of permutations gets quite unmanageable, and we could start to account for those, but we ran out of time."

One thing that did stay in – against all odds – was the two-player mode using the PlayStation link cable. Martin recalls there was "a lot of pressure from Sony" to use the link cable, but developing the link-up mode was "an absolute nightmare", with the two machines often going out of sync. Unsurprisingly, the link cable was dropped for the sequel.

Considering the race to get *Destruction Derby* out in time, it's remarkable to learn that the game's most famous level – the arena-like Bowl – was added almost as an afterthought, right at the end of development. "Martin had come up with this idea that it would be really cool to see all the cars crunching together in this big arena," says Mike, "and I think that was basically done over a period of about two days." Robert agrees: "It was kind of thrown in," he says.

Finally, after a feverishly fast nine months of development, *Destruction Derby* went on sale in October 1995, a couple of weeks after the PlayStation launch. Mike recalls that the "reviews weren't stellar", but the game was a huge success nonetheless, overtaking *WipeOut* as the fastest selling CD-based game. And the huge sales meant that work on a sequel started in short order. "We didn't have much downtime after the first one," says Mike.

Martin says that with *Destruction Derby 2*, he wanted to introduce a grander scale, more akin to real NASCAR racing. The tracks were accordingly made bigger, but Mike says that the main thing they were looking to do was to "make the crashes a bit more spectacular". This involved completely reworking the "simplistic" physics engine of the first game, as well as minimising the prequel's texture warping, a common affliction of early PlayStation games.

» [PlayStation] Each of the various collisions in *Destruction Derby Raw* gets its own name, like 'Teeth Rattler' and 'Jaw Breaker'.

[PlayStation] Liverpool-based Studio 33 took over development for *Destruction Derby Raw* while Reflections went to work on *Driver*, a game that would spend years in gestation.

[PlayStation] The colour palette for *Destruction Derby Raw* is noticeably murkier than the pastel shades of the first two games, but there's also far less pop-in.

The field of view was also changed to enhance the feeling of speed, and the gameplay was made a little more forgiving when your car was severely damaged.

As part of the effort to make the game look more like authentic NASCAR, Martin and others flew out to photograph US tracks. But he hit a stumbling block when trying to capture the textures of the cars themselves. "The American sporting bodies were not very helpful," he says. "In the UK, I could just go down to a raceway and literally turn up with a camera, hop over the barrier and go photograph them. I kept getting stopped in the US and they'd say, 'What are you doing? No, you need authority from the management, you need to sign this, that and the other, and you're not doing it today,' and I'd be back on the plane again. The other thing was that a lot of American races run at night, and that made the photography extremely difficult."

As a result, the team ended up designing their own take on NASCAR vehicles from scratch. "But that did introduce an element of hand-drawn look to it, which I was never keen on," Martin says. "Not that I thought that the artists did a bad job, it's just that I preferred that photorealistic look." Martin was also unsure about the larger tracks. "I always was in two minds about the decision to go with much bigger tracks.

It made the tracks more interesting, made them faster, but it spoiled some of the intensity of the crashes because the cars were more spread out." To compensate, the team used rubber banding to keep the cars closer together and provide more opportunities for crashes.

Destruction Derby 2 would have a similarly rushed development to the first game, being completed in around ten months. In fact, Mike says the crunch was worse on the second game as a result of the huge changes introduced. "Because we'd been so ambitious in terms of pushing on so many different things, we had to completely rewrite the physics engine," he says. "We started with the basis of [the original] *Destruction Derby*, but pretty much everything had changed towards the end."

The work paid off in glowing reviews for the sequel on its release in 1996, with *Official UK PlayStation Magazine* calling it "massively improved" over the first game, and *Edge* lauding the "impressive" new 3D engine. It was a financial success, too, chalking up slightly higher sales than the original. But this was also to be the end of Reflections' involvement in the series. "They wanted a third game," says Martin, "but I wanted to do *Driver*. And I thought that *Driver* had this sense of urgency about it, which was if we don't do this now, someone else will do it."

Psygnosis still held the IP rights for the series, and with Reflections busy doing *Driver*,

LAP 02/04 POS 12 SCORE 023400

136 kph

> **I ALWAYS WAS IN TWO MINDS ABOUT THE DECISION TO GO WITH MUCH BIGGER TRACKS. IT MADE THE TRACKS MORE INTERESTING, MADE THEM FASTER, BUT IT SPOILED SOME OF THE INTENSITY OF THE CRASHES BECAUSE THE CARS WERE MORE SPREAD OUT.**

MARTIN EDMONDSON

OFFICE JAPES

Robert Troughton says that working at Reflections in the early Nineties was a bit like an extension of university, with all the filth and tomfoolery you'd expect of student digs. He remembers his first ever task was to carry a saggy cardboard box full of half-empty Coke cans out to the wheelie bins – but the spilled Coke had dangerously degraded the integrity of this makeshift waste receptacle. "The bottom just fell out," he recalls. "And some of these Coke cans, they must have been on the desks for months. [The] Coke seemed to turn into this black oil… it was disgusting."

Still, it was a laugh, says Robert. "We were always joking around. We used to have a tiny little football to decide who would make the next round of coffee. Two people would be stood at either side of the office, and you'd just kick the ball at the other person. The first person to go down, they'd go and make the coffee." He reckons the office chair racing was pretty epic, too.

But the joking went too far on one occasion. When office head Martin Edmondson was away, the programmers added an Easter egg to a build of *Destruction Derby* that was due to be sent for testing. Holding down certain buttons on the title screen would reveal a picture of the developers, with Martin's head comically enlarged and artist Phil Baxter's head shrunk right down – but this meant the build was rejected by Sony. "They just didn't want secret things in the games," explains Robert. "If you had a cheat code, you had to declare it. So they just instantly failed the game."

the publisher made the unusual decision to ask Looking Glass Studios to make a version of *Destruction Derby* for the Nintendo 64. The US studio was more well known for immersive sims and RPGs like *System Shock* and *Ultima Underworld*, so it seemed an odd choice to make a racing game, but nevertheless *Destruction Derby 64* was fairly well received. Development took around 18 months, with the game eventually coming out in October 1999, and with publishing duties being handed over to THQ along the way.

The main racing was completely changed for *Destruction Derby 64*: instead of laps, races ran on checkpoints, and there was much more focus on destruction. Cars started out in groups around the track facing in opposite directions, and players now gained points for head-on collisions. But *IGN* complained that after some spectacular pile-ups at the start, this mode would boil down to "lonely racing around unimpressive tracks with only an occasional burning wreck to look at". Still, critics praised the introduction of new multiplayer modes like Bomb Tag and Capture The Flag.

For the next entry, Psygnosis approached Liverpool-based Studio 33, which had been formed by ex-Psygnosis staff in 1996 and already had a string of racing games under its belt. *Destruction Derby Raw* would come out towards the end of the original PlayStation's lifespan in 2000, and by around the time of its release, Psygnosis had been fully consolidated into Sony Computer Entertainment and renamed SCE Studio Liverpool.

LAP 03/04 POS 01 SCORE 013900

093 kph

LAP 01/04 POS 20 SCORE 000600

072 kph

Raw featured much more arcade-like handling than the earlier Reflections games, along with many more options for scoring points from collisions. The main racing mode had dozens of tracks, and the 'Smash 4 $' mode let you earn money from crashes to buy upgrades for your cars. Plus there was a suite of multiplayer modes, including Skyscraper, where you're encouraged to nudge your friends off a building. Even so, the game received mixed reviews, with *Gamespot* praising *Destruction Derby Raw*'s "overwhelming variety", but *Next Generation* complaining that the gameplay was "exactly the same as the first two in the series".

Studio 33 came back on board for the final entry: 2004's *Destruction Derby Arenas* on PlayStation 2. The big headline feature for this game was online multiplayer, but overall it was poorly received, with a Metacritic score of just 57. *IGN* complained about the "floaty" physics and disappointing graphics, saying *Arenas* "has the look and feel of a PS One game" and is ultimately only "fun for an hour or so". And that was that for *Destruction Derby*. After causing such a smash as one of the PlayStation's most memorable launch titles, it seems a shame that this great series died off with such a whimper. ◆

ESSENTIAL GAME
Pathway To Glory

This turn-based strategy game arrived at a rather unfortunate time, as it was easily overshadowed by a glut of World War II games on more popular platforms. That's a shame, because this is the best exclusive to be released in the short life of the N-Gage. The game uses detailed 2D visuals rather than the system's much-touted 3D graphics, but does take advantage of the system's multiplayer capabilities, offering local play via Bluetooth and online play through N-Gage Arena. A sequel, titled *Pathway To Glory: Ikusa Islands,* was released in 2005 and was of similarly high quality.

N-Gage

» **MANUFACTURER:** Nokia » **YEAR:** 2003
» **COST:** £299.99 (launch), £70 (today, boxed, unlocked), £50 (today, unboxed, unlocked)

With mobile phones having become widely adopted around the turn of the millennium, Finnish mobile phone giant Nokia felt that gamers would prefer not to carry both a dedicated handheld console and a phone. To that end it created the N-Gage, a phone with powerful 3D graphics hardware and dedicated, proprietary games distributed on MMC memory cards. Nokia gained support from major publishers including Electronic Arts, Activision, Sega, THQ and Eidos, with early highlights including conversions of *Tomb Raider, Tony Hawk's Pro Skater* and *Sonic Advance* (renamed *Sonic N*).

The attempt to provide a hybrid phone and console resulted in a number of uneasy compromises that left the N-Gage unsuited to either task. As a gaming device, the N-Gage suffered from the use of a vertically oriented screen, and a game slot that could only be accessed by removing the battery. As a phone, the system's unusual orientation was far less of a problem than the choice to position the speaker and microphone on the side of the device. These flaws and a lack of desirable exclusive games led to very slow sales, prompting Nokia to reboot the project with the revised N-Gage QD model just seven months after launch. ✳
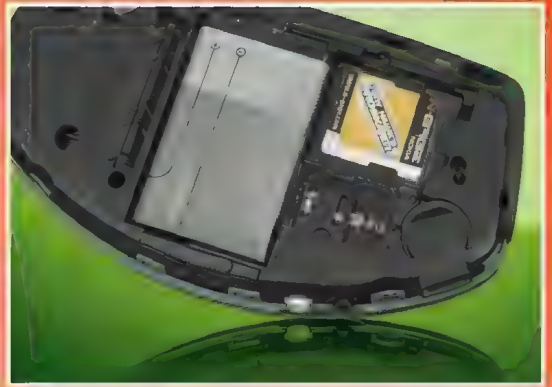
NOKIA

THE MAKING OF
ETERNAL DARKNESS
Sanity's Requiem

DIRECTOR DENIS DYACK TAKES US THROUGH THE MAKING OF HIS WELL-REGARDED,
TIME-CROSSING, CULT HORROR ADVENTURE

Words by Darran Jones

Videogame mechanics don't progress anywhere nearly as quickly as the visuals that power them, so cinematic storytelling and character evolution are becoming increasingly important in modern gaming. *The Last Of Us*, *Detroit* and *Enslaved: Odyssey To The West* are just a few of the more recent games that have tried to blur the boundaries between two very different forms of entertainment, but they certainly weren't the first. 18 years ago, another game was also slowly blazing a trail, a trail that would guide its developers to the forefront of the industry, but eventually see it collapse under its own hubris. The game was *Eternal Darkness: Sanity's Requiem*; the company, Silicon Knights. Both were spearheaded by Denis Dyack, and when we talk to Denis about his magnum opus we speak to a man who loves *Eternal Darkness* and the art of storytelling as much as he loves his three cats, Gracey, Willie and Owen.

"I'm a big *Babylon 5* fan," reveals Denis when we ask him about *Eternal Darkness'* origins. "I think it was a hallmark series because, for the first time on television, they actually told a story that was continued over the whole year and then they had a story arc that was meant to go for five years, and that had never been done on TV before. We looked at *Babylon Five* and said, 'This is groundbreaking, we love it,' and it was more about the storyline and the arcs that happened in the background. There were also a lot of characters, but they were less important than the story. We sort of looked at *Resident Evil*, looked at this whole phenomenon happening at the time with *Babylon 5*, and we said, 'We should do something like that.' So the idea was to have lots of characters and really tell a story arc that meant something over a long period of time."

Plans for *Eternal Darkness* were put into motion, and Denis and his team began looking for a suitable console. Although Silicon Knights had previously found success on PC and PlayStation, thanks to titles such as *Dark Legions* and *Blood Omen: Legacy Of Kain*, Denis and his team eventually settled on the N64, mainly due to its relationship with Nintendo that had recently begun to blossom. "It was a great system and it did a lot of things at the time that other systems didn't," explains Denis about the decision to release *Eternal Darkness* on Nintendo's 64-bit console. "We were running at the time in high-res without an extra memory card, which was really rare. I think it was 640x480, back then if you went to that, you had to put the extra memory in and it cost a lot more to manufacture. We actually figured out a way to do it without the extra memory, so from that perspective it garnered a lot of attention. At the same time it was a very mature take on storytelling which was rare at the time in the industry, but also I think it was very different as far as Nintendo's portfolio went.

Work progressed well, but the game began to hit several delays – something that later Silicon Knights games would become infamous for – and as development time dragged on, Nintendo began preparations to launch its next console. Eventually, development of the game pivoted so *Eternal Darkness* could move to Nintendo's successor console, the GameCube, where it was initially planned as a launch title. We're keen to find out if Denis was happy about the decision. "It was shortly after the GameCube was ▶

> "WE SORT OF LOOKED AT RESIDENT EVIL, LOOKED AT THIS WHOLE PHENOMENON HAPPENING AT THE TIME WITH BABYLON 5 AND WE SAID, 'WE SHOULD DO SOMETHING LIKE THAT'"
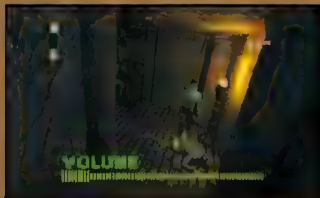> **DENIS DYACK**

VIRTUAL INSANITY

ETERNAL DARKNESS' SANITY EFFECTS HAD EVERYONE TALKING

WHERE'S MY SAVE?
■ By far the most infamous effect. The save screen comes up and appears to delete everything. You'll swear loudly the first time.
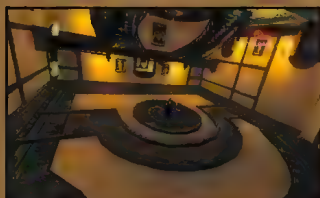
PUMP UP THE VOLUME
■ There are a few sound-based sanity effects. This memorable one mimics your TV's volume being turned down.

THERE WILL BE BLOOD
■ As your sanity drops, blood will appear and start trickling down the screen. It's a creepy and surprisingly effective effect.

DANCING ON THE CEILING
■ You'll enter a room to discover that everything is upside down. You'll be able to run around for a while before it all resets.

LAND OF THE GIANTS
■ Upon entering this room you'll discover that you've shrunk, making you easy target practice for any nearby enemies.
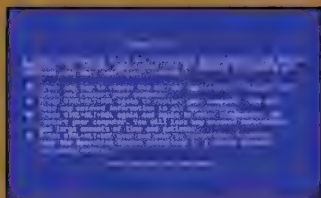
SYSTEM CRASH
■ Another sanity effect that makes you think the game has crashed. Interestingly, it mimics a PC BIOS.
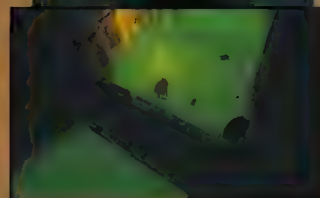
BUZZ OFF
■ Some of the best sanity effects are the subtle ones. This clever moment tricks you into thinking a bug has landed on your screen.

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announced and we were fairly far along in the process of the N64 version," he remembers. "As a matter of fact, I'm sure we were perhaps past alpha and getting close to beta, so it was quite a shock to me and to the whole team, but this was a decision that Nintendo made and it had nothing to do with their opinion of the game at all. They really liked the game, but it was a global decision where they said, 'We need to move forward with the GameCube now, this is a new set of hardware and this is what we think we should do.' A lot of people were particularly worried if that was the right thing to do, but it was and we could certainly do a lot more with the GameCube hardware. It had a lot more RAM, it had a disc, and in the end I think we'd all agree that it turned out to be without question the right decision."

Denis speaks highly of Nintendo, and it's clear he has a lot of respect for the company. What's less clear, however, is just how much hand-on involvement Nintendo had. Some have said it was a lot, and turn to the lower quality of Silicon Knights' later games as proof of this. Denis remembers a nurturing environment, one where Silicon Knights was allowed to create its own vision, with Nintendo giving help and advice when needed. "We worked very closely with Nintendo and some people came down from Nintendo to work with Silicon Knights for quite a while," he reveals. "Miyamoto is really, really good at what he does and works extremely hard. We went through different cameras,

what would be best for the game, and I would say that they generally would respect what we were creating and at the same time say, 'What about this idea? We think this would be better,' and we would sit back, think about it, digest it, and we would agree as a team whether we wanted to go in one direction or another. There was a team of people from Nintendo who worked with us, and certainly Miyamoto oversaw our project like he oversaw everyone else's project, and we collaborated within that hierarchy. If they were unhappy with the project, it wouldn't have gone forward."

Eternal Darkness did go forward and was eventually released seven months after the GameCube's US launch. The delay wasn't due to problems at Silicon Knights, but more due to world events. The tragedy of the 11 September 2001 attack on the World Trade Centre shocked the world and resulted in several games being delayed – or, in the case of *Propeller Arena*, cancelled outright. Large parts of *Eternal Darkness*' story takes place in the Middle East and several chapters were extensively reworked, meaning *Eternal Darkness* missed its launch window. We were keen to know if the delay was due to painting that part of the world in a specific way, only to be given an emphatic, "No!" by Denis. "But there was just a lot of stuff going on at the time that just got people nervous, so we did have to change certain things," he adds. "If we hadn't have had to have done that, we would have made launch on the GameCube. We were tracking extremely well but we had to change some

"WE WERE FAIRLY FAR ALONG IN THE PROCESS OF THE N64 VERSION"
DENIS DYACK

» [GameCube] There are two types of cinematics, the best ones utilise the in-game engine. The prerendered ones have aged quite badly.
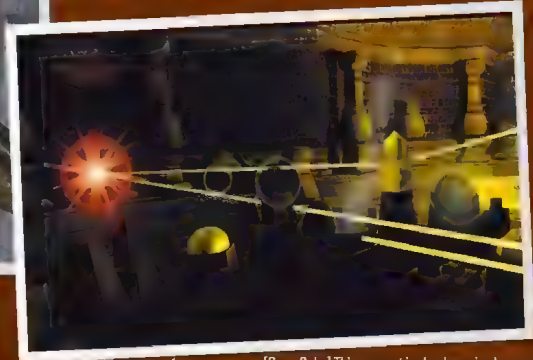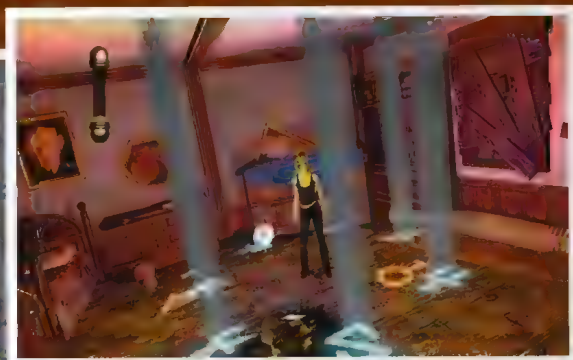
» [GameCube] This moment is clearly paying homage to *Raiders Of The Lost Ark*.

» [GameCube] Every character has a neat finishing move. Killing monsters restores sanity, so keep that bloodlust topped up.

chapters and it's just one of those things that happens. It's totally out of your control."

One thing that wasn't out of Silicon Knights' control was the epic story of *Eternal Darkness*, a tale that spans time and space and has plenty of connections with the work of HP Lovecraft. The game begins with a section that takes place in 26 BC and ends over two millennia years later in 2000 AD. It tells the story of a young girl, Alex, who is investigating her grandfather's mysterious death. As she continues to explore his huge mansion – cleverly presented as a gaming hub – she uncovers a book called the Tome Of Eternal Darkness, the chapters of which acts as levels for the characters you control throughout the game's duration. Alex soon uncovers a plot by Pious Augustus, a fallen Roman Centurion, to awaken an ancient evil that will enslave and devour the world, not unlike the creations described in HP Lovecraft's own macabre stories. "What I particularly like about Lovecraft in general is that Lovecraft didn't say that these monsters were magical he just said they were extremely advanced and ancient," continues Denis when we quizzed him about the obvious similarities. "We're like bugs to them, we really don't affect their world in any way, but at the same time they have their own limits and they're trying

to come into our dimension, but they really can't. Lovecraft was so strong in that area. Look at *Babylon 5* – [which is] quite frankly, ancient beings that have been around a long time, and mankind stumbles into them. We're in space, but it's still the same themes. It's that type of recurring idea, which I think is the stuff that's worth telling."

If you have stuff that's worth telling you need a way to convincingly convey it. Silicon Knights did it by allowing you to control 12 characters, ranging from Pious Augustus, the man who puts the story's events into motion, to a Persian swordsman named Karim, and a Franciscan monk who uncovers an insidious plot at the cathedral he visits. Each character not only handles completely differently, but also has his or her own strengths and weaknesses. Roberto Bianchi is a portly Venetian artist with a lumbering gait and low health, while firefighter Michael Edwards can shrug off most enemy attacks thanks to his great stamina and access to advanced weapons. "If you're going to tell a story you want some pivotal events that you think are significant in human history, which is what we did," explains Denis. "From that point it just becomes a case of creating fiction around this point of historical accuracy. So we went around and chose spots that we thought were unique and interesting and gave us a perspective that wasn't just North American centric. The whole Lovecraftian overtones with the universe that we had created, that part was obviously fiction, but a lot of the stuff that we did was as close to history as we could research. We looked for interesting locations, interesting time periods and went from there."

While controlling so many different characters did set *Eternal Darkness* apart from its peers, it also caused technical problems, mainly because so many different weapons were shoehorned into a single set of combat mechanics. It means that the controls and fighting can occasionally feel clunky, which can cause frustration. "It was very hard actually and I think you've exactly pinpointed some of the challenges we faced," agrees Denis about the combat system used. "If you do something completely different every time, the player is going to get really ▶

Shadow Of The Eternals was a spiritual sequel being made at Denis Dyack's company, Precursor Games. It was cancelled and the company disbanded in 2013.

frustrated because they have to learn something new. It's kind of like when you're playing a game and lose all your weapons and have to start over. I hate that feeling, personally. We wanted to make it consistent where you use the same techniques as a player, but as an overall metagame it feels like they're accelerating and learning new stuff and then at the same time you want to introduce different experiences. It's always a challenge."

No matter how challenging *Eternal Darkness'* gameplay may have been at times, it certainly couldn't compare with the sheer horror you received as a player when the avatar you had been controlling for the past 30-odd minutes dies – often in very brutal circumstances. It felt revolutionary at the time, and while it could aggravate, it also told you in no uncertain terms that this was Silicon Knights' story and you were just participating in it, lucky to be along for the ride. It works exceptionally well and still makes *Eternal Darkness* stand apart from many newer games. "Let's face it, even in a lot of popular culture it's not done that much," continues Denis. "I think, for example, *Game Of Thrones* does that now. When you're trying to entertain somebody you really want an emotional catharsis. [A moment] that sticks out in my mind is when you're playing Paul Luther. You know that there's a boss fight coming. You see that greater guardian and you're like, 'Okay this is going to be an awesome boss fight,' and then you look up and you're squashed like a bug. And it's over. I remember when we did focus testing on that people were just like, 'Wow...' They were really upset and there was a concern whether that was the right thing to do. I think it is. From a standpoint of real life, sometimes the good guys lose. Life is not always fair, and I think from that standpoint *Eternal Darkness* really stands out as something that made a statement in that area."

Another area where *Eternal Darkness* stood out was with its brilliant insanity effects. As characters succumb to various atrocities, they slowly lose their grip on reality, and the player begins hallucinating. Initially you'll just witness blood running down your TV screen, or your TV's volume seemingly getting lower, but as the adventure progresses, things get more and more severe, with one

"FROM A STANDPOINT OF REAL LIFE, SOMETIMES THE GOOD GUYS LOSE"
DENIS DYACK

of the best emulating your memory card being erased. It's a terrifying moment the first time it happens, and we still fall for it on subsequent playthroughs. Unsurprisingly, the idea came from Denis and his team wanting to do something a little different to the norm. "It was another chance for us to play with the genre," admits Denis. "With this type of structure you could do it at multiple levels. You could break the fourth wall. It was something that I found very teresting and there were a lot of challenges with that stuff. It wasn't something that was so easily done at the time, that was for sure."

And that's the real beauty of *Eternal Darkness*. It isn't a perfect game, but it's certainly ambitious, often going out of its way to give players a unique interesting experience that similar games of the time simply weren't offering. It's one of our favourite early examples of marrying videogames to the cinematic narratives that have become so popular, and it marks a high point for Silicon Knights, which it never quite replicated before its collapse in 2014. For those lucky enough to have experienced its unique blend of horror and innovative design, *Eternal Darkness* remains the definition of a flawed masterpiece. ★

HEROES THROUGH TIME

THE MAIN CHARACTERS OF ETERNAL DARKNESS: SANITY'S REQUIEM

ALEXANDRA ROIVAS
VOICED BY: Jennifer Hale
YEAR: 2000 AD
OCCUPATION: Student

■ Alex is a woman who is summoned to Rhode Island after her grandfather's gruesome death. She navigates his hub-like mansion looking for clues to his murder.

PIOUS AUGUSTUS
VOICED BY: Richard Doyle
YEAR: 26 BC
OCCUPATION: Centurion

■ The game's main antagonist. Pious is a proud warrior but he's soon led astray by the ancients and becomes incredibly powerful with his own dark agenda.

ELLIA
VOICED BY: Kim Mai Guest
YEAR: 1150 AD
OCCUPATION: Court Dancer

■ A young Cambodian slave who craves adventure. She soon finds it after becoming locked in an ancient temple and stumbling across Pious' evil plan. The first of many bearers of Mantorok's essence.

ANTHONY
VOICED BY: Cam Clarke
YEAR: 814 AD
OCCUPATION: Messenger

■ Poor old Anthony doesn't have much luck. Although he uncovers a plot to kill the emperor Charlemagne, he becomes cursed, getting more withered as his investigation continues.

KARIM
VOICED BY: Rino Romano
YEAR: 565 AD
OCCUPATION: Swordsman

■ Karim attempts to retrieve a treasure for his beloved Chandra, but she betrays him. When he meets her ghost years later he nobly sacrifices himself to watch over an artefact.

DR MAXIMILLIAN ROIVAS
VOICED BY: Bill Hootkins
YEAR: 1760 AD
OCCUPATION: Doctor

■ After inheriting a mansion, he realises it has a secret. Discovering it's built on an ancient city, he's proclaimed mad and locked away.

DR EDWIN LINDSEY
VOICED BY: Neil Ross
YEAR: 1983 AD
OCCUPATION: Archaeologist

■ Possibly based on Indiana Jones, Edwin Lindsey is tricked by Pious Augustus when exploring some Cambodian ruins. He escapes and discovers the remains of Ellia.

PAUL LUTHER
VOICED BY: Paul Eiding
YEAR: 1485 AD
OCCUPATION: Franciscan monk

■ After visiting an old cathedral to see the famous Hand Of Jude, Paul is accused of murder. After being freed, he discovers an ancient relic but is killed by its protector.

ROBERTO BIANCHI
VOICED BY: Phil Proctor
YEAR: 1460 AD
OCCUPATION: Artist/architect

■ Hailing from Venice, Roberto is taken prisoner and forced to survey an ancient temple. He encounters the spirit of Karim who passes the artefact of Mantorok to him.

PETER JACOB
VOICED BY: Michael Bell
YEAR: 1916 AD
OCCUPATION: Field reporter

■ Peter is investigating disappearances at the very cathedral that Paul Luther died in. He defeats a guardian and hands an artefact to Edward Roivas.

DR EDWARD ROIVAS
VOICED BY: Neil Dickson
YEAR: 1952 AD
OCCUPATION: Clinical psychologist

■ Edward discovers the tome of darkness. Despite facing deadly odds he's able to destroy it. He's later murdered by a guardian, which kicks off the game's plot.

MICHAEL EDWARDS
VOICED BY: Greg Eagles
YEAR: 1991 AD
OCCUPATION: Firefighter

■ Michael Edwards is a firefighter during the Gulf War, but gets trapped in the Forbidden City when an explosion leaves him there by himself.

Hotel Dusk: Room 215

A PLACE YOU WON'T WANT TO LEAVE

My love for the Nintendo DS is well-documented, but it's worth reiterating here. While many scoffed at its graphical power and gimmicky nature when it debuted, I was having the time of my life with Nintendo's new handheld. Some games did indeed feel a little naff or lazy in their execution, but later releases like Cing's *Hotel Dusk* were able to offer me an experience that many consoles of the time simply couldn't match.

Hotel Dusk puts you in the worn trench coat of Kyle Hyde, a former New York City detective who is now a travelling salesman and searching for his missing partner. After passing a strange girl on the highway, Kyle arrives at Hotel Dusk and finds himself in a room that's rumoured to grant wishes, and a building that's filled with mysterious patrons. It's an intriguing premise and it becomes even better as *Dusk*'s well-written plot slowly unravels like a delicate thread.

One reason why *Dusk* works so well is because it feels like an interactive novel, largely down to the fact you hold the DS like you would a book. Much of Cing's unique game involves you chatting to people using dialogue options and easing information out of them, but there are also segments where you move around the hotel and use your stylus to interact with specific items in the environment, like you would with any point-and-click adventure. It's a novel way of presenting a classic genre and highlights the strength of Nintendo's handheld when it was used by creative minds.

This creativity extends to *Dusk*'s distinctive look, which highlights that you don't need cutting-edge visuals if you have a stylised art direction. While characters in *Hotel Dusk* are depicted in black and white, the areas you explore are in full colour, giving proceedings a dramatic, dreamlike style. This is further enhanced by the fact that many cutscenes are often left unfinished, like a paint-by-numbers scene the artist couldn't be bothered to complete.

While I enjoyed *Hotel Dusk* enough to pick up its sequel, I've never found time to play what would become Cing's last game. Now I've got some time on my hands, it feels like a good opportunity to continue Kyle's adventure some 13 years after I first started it. ✱

>> This month we put the Evercade through its paces, find out if the new Streets Of Rage lives up to all the hype and also get to play a spangly new version of the arcade classic, Missile Command

» [Evercade] Atari 7800 games aren't commonly seen on retro services, so their presence here is very we come
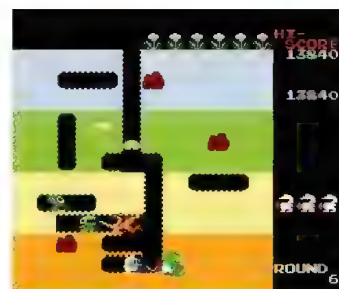
»[Evercade] Any arcade hits will be seen in their console form – *Dig Dug* here is the NES version.

»[Evercade] Popular games like *Earthworm Jim 2* on *Interplay Collection 2* are the biggest draw for the system.

Evercade

A PROMISING PRODUCT WITH TEETHING TROUBLES

INFORMATION

» **RELEASED:**
OUT NOW

» **PRICE:**
£59.99

» **PUBLISHER:**
BLAZE

» **DEVELOPER:**
BLAZE

» **PLAYERS:**
1

While the recent wave of mini consoles has been a good thing overall, it's easy to understand why they don't scratch the itch for everyone. With their fixed software line-ups, the fun inevitably has a limit. What's more, they can't offer one important part of the fun of retro gaming – building a collection. Blaze has attempted to fulfil that need with the Evercade, a dedicated retro gaming handheld that runs bespoke compilation cartridges. But does it represent a good way to play these games?

The device itself is relatively basic, in order to keep costs down. An internal battery supplies four to five hours of power, and charges via an included Micro USB cable (though as with many devices these days, there's no plug adapter included). A Mini HDMI port is present for TV output, though you'll need to supply your own, and a headphone jack is present for audio. The controls consist of a digital d-pad, four face buttons and two shoulder buttons, and these feel excellent. The d-pad is both precise and comfortable to use, and the shoulder buttons offer a satisfying click when pressed. The device is also reasonably sized, and feels good to play with for extended periods.

Of course, for this price some compromises have been necessary, and the most notable is the screen. Colour reproduction is good and there is no blurring to note, but the display uses the same 480x272 resolution as the PSP – which is now rather low. Theoretically, this isn't a problem as the games emulated by the system all run below this resolution. However

» New collections have been announced, including two Lynx packs and a collection featuring *XenoCrisis* and *Tanglewood*.

BRIEF HISTORY

» The Evercade is a handheld console announced by Blaze in 2019, dedicated to running retro games. The system features a 1.2 GHz quad-core CPU and runs emulators that have either been licensed or developed specifically for the console. The multi-game cartridges are officially licensed from major publishers and indie studios, with the launch line-up including compilations from the likes of Namco, Atari, Data East and Interplay.

»[Evercade] The second *Namco Museum* cartridge offers some deeper cuts like *Pac-Attack* and *Phelios*.

★ PICHS OF THE MONTH
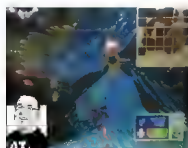
DARRAN
Treasures Of The Deep
I'm still waiting for my Evercade to ship. In the meantime I'm enjoying this obscure underwater blaster for the PlayStation

NICK
Streets Of Rage 4
This is everything I hoped it would be, and surprisingly Cherry Hunter has actually replaced Blaze Fielding as my main character.

»[Evercade] Data East's collection is one of our favourite cartridges, with plenty of variety on offer
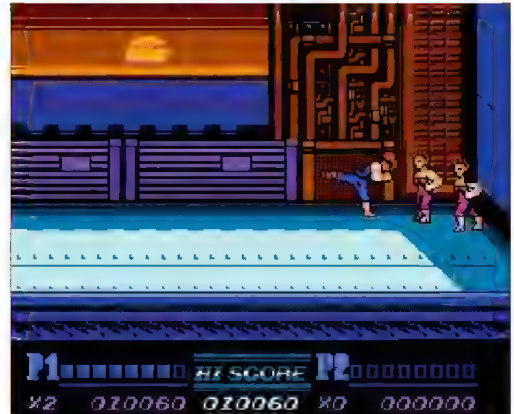
»[Evercade] Control mapping wrong-footed us in games like *Double Dragon II*, but the new firmware update improves this greatly. You still can't remap controls, though.

there are no pixel-perfect or integer scaling options, with just 4:3 or 16:9 options available, so on the handheld display you'll get a fairly soft image with some shimmering during scrolling. TV output is 720p, and generally looks rather better than the handheld display, though shimmering is again unavoidable due to the way scaling is handled. For most players this will be fine, but if pristine image quality is of great importance to you, you may wish to look elsewhere.

Upon starting the system, a short start-up screen is followed by a simple game selection menu displaying game details, a screenshot and box art. Pressing the menu button during a game allows you to access save states, change screen options or return to the game selection screen. So far, five systems are emulated – the NES and SNES, Atari 2600 and

7800, and Mega Drive. These are all handled well, with no speed or accuracy problems that we were able to notice. Interestingly, the games are not identical to their original cartridge counterparts – new copyright text is shown, which raises the possibility that Evercade versions of games may be able to carry bug fixes.

Ten cartridges are available at launch, with each priced £14.99 and offering between six and 20 games for a total of 122 games. The standard edition comes with Namco *Museum Collection 1* (11 titles), and the premium edition adds *Atari Collection 1* (20 games) and *Interplay Collection 1* (six games). The games are well packaged, with plastic boxes and full-colour manuals, and feel like something you'd want to collect – and this is encouraged, as each release is numbered. The cartridges themselves

are labelled on both sides, so you can easily identify them both in the box and during use.

If you're okay with the fact that the arcade hits on offer are console conversions, the collections are put together well, too. Big-name titles like *Pac-Man* and *Earthworm Jim* are present to draw people in, but plenty of the lesser-known games are just as enjoyable. What's particularly good to see is that the team isn't just treading the same well-worn ground – there aren't many other places to get Atari 7800 games, for example. The question with a system like this is always long-term support, but three more cartridges are already scheduled for release in 2020.

There are three major issues with the Evercade at launch. The biggest is that a minority of games exhibited random sound drop-outs and unpleasant corruption via HDMI. This happened using both a capture device and connecting the Evercade directly to two TVs. This is something Blaze has indicated will be fixed in a firmware update, but this was not available when we went to press. There is also currently no way to remap control layouts independently of the game's own options, and while in-game control options can mitigate that to some extent, the defaults can be far from ideal. A firmware update (via a Windows PC)

has been issued to alleviate the issue, but full mapping would be welcome in the future. Lastly, you can't connect a second controller, so multiplayer is out. This is by design – though games do retain their multiplayer modes, Blaze says these are for use in future Evercade products.

Broadly speaking, we like the Evercade. The hardware feels good, the level of performance doesn't fall below the average of available mini consoles, and the ability to buy new games is a powerful draw. If Blaze can sustain the levels of software support it has right now, the system will be a fun, low-cost way to collect and play retro games. However, all potential buyers are advised to check the status of firmware updates before purchasing the system, particularly if they want to play on a TV. ✱

In a nutshell

If used exclusively as a handheld, the Evercade is a fun, cheap device that offers a good library of cartridges to collect. If you're planning to use it on a TV, hold fire until a sound issue fix arrives.

»[Evercade] The game selection menu is basic but well designed, showing cover art and a screenshot.

★ PICK OF THE MONTH

Streets Of Rage 4

» **System:** PS4, Xbox One, Switch (tested), PC » **Buy it from:** Online, Retail (July 2020) » **Buy it for:** £22.49

It's been a long time since we've seen Axel Stone and Blaze Fielding cleaning the streets of thugs, but only ten storyline years have passed. In that time, the protagonists of old have left the police force, and the Y twins – son and daughter of Mr X – have taken control of the city. Now it's up to Axel and Blaze to return to action, but they've got new allies. Adam Hunter's daughter Cherry is an agile fighter with some cool leaping moves, while Floyd Iraia has super strength thanks to the robotic arms developed for him by his mentor, Dr Zan.

Rather than trying to reinvent the wheel, the developers have taken the gameplay of *Streets Of Rage 2* and added plenty of new elements to it. A new combo system allows you to juggle enemies in mid-air, with bonus points awarded based on damage rather than the number of hits, so bonuses are balanced between combo-crazy characters like Cherry and powerhouses like Axel. Special moves still reduce your health, but you now have the opportunity to recover it by hitting enemies until you take your next

hit. New environmental hazards include wrecking balls and poisonous goop, and enemy in-fighting is now a factor, as the criminals and cops will target each other as well as you.

The comic-book visuals are perfect for this type of game, and the excellent electronic soundtrack pays homage to the past while incorporating modern influences. The game is sufficiently challenging, but if you're having trouble, optional continue services allow you to bring the difficulty down in targeted ways. The story, though simple, is effectively told, and there are plenty of great callbacks for veteran fans, from graphical details and unlockable extras to some of the behaviour of enemies and bosses.

Dotemu, Lizardcube and Guard Crush Games have together created a worthy new entry in a fantastic series, further adding to the evidence that Sega's recent policy of outsourcing to passionate fans is working.

>> **Score 90%**

»[Switch] Effective use of special moves is a good way to max out your combo damage.

»[Switch] The new graphical style works very well in motion, with great attention paid to lively character animations.

SNK Gals' Fighters

» **System:** Switch
» **Buy it from:** Online » **Buy it for:** £7.19

Originally released on the Neo Geo Pocket Color, this brings together women from *The King Of Fighters*, *Samurai Shodown* and *The Last Blade*. It's a little formulaic, with few surprises beyond power-up items selected prior to matches, but it's put together well and offers some fun moments. Code Mystics has done a good job with the emulation, offering flexible scaling, a good LCD filter, a rewind mode, various Neo Geo Pocket surrounds and even the original manual. Most importantly, multiplayer is possible on a single system – something the original link mode couldn't offer. It's not the deepest of fighters, but we're pleased to see it handled with such care.

>> **Score 80%**

Space Mouse 2

» **System:** PC » **Buy it from:** Steam
» **Buy it for:** £TBC

In this sequel to an early Japanese home computer game, your goal is to descend to the bottom of a long tunnel while avoiding enemies, collecting items and maintaining your energy. Blocks impede your progress, but it's possible to break through at the cost of your energy. If you imagine a cross between *Pac-Man* and *Mr Driller*, you're part-way there. The concept is delivered with some early Eighties-style pixel art and chiptunes, and there are plenty of options, including turn-based play, scanlines, and an extra Piyo Love mode that tasks you with collecting birds in a similar manner to *Flicky*. If you're a fan of Japanese golden age arcade games, this comes recommended.

>> **Score 86%**

Missile Command: Recharged

» **System:** Switch (tested) Android, iOS, PC
» **Buy it from:** Online, Steam » **Buy it for:** $2.99

As much as we love *Missile Command*, home versions have struggled over the years with their controls. This fun update has similar issues. While the available controls are okay, the Switch version suffers compared to alternative touchscreen-based mobile ports we've recently played. It's neat that different buttons are assigned to different turrets, as it lets you respond more quickly, and there are plenty of fun power-ups. Finally, it's hard to argue with the low price. Our advice is to go for the superior mobile releases (which we'd give an extra 15%), as they do a far better job of capturing the frantic nature of the 1980 original.
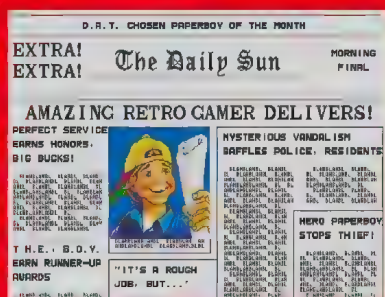
>> **Score 68%**
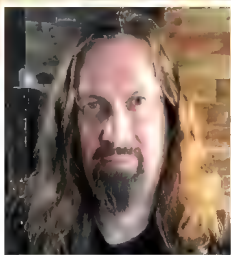
ROCKING THE RETRO

Jason Lindsey takes time away from YouTube to show us his collection

BIO

NAME:
Jason Lindsey

LOCATION:
Seattle, USA

FAVOURITE SYSTEMS:
C64, PS2, PSP, PC

TWITTER:
@MetalJesusRocks

NEVERWINTER NIGHTS AOL EDITION
"The world's first graphical MMORPG. Incredibly difficult to find a complete copy these days… and yes, it only works on AOL!"
PAID: NA

I f you've ever spent much time browsing retro gaming videos, you've probably seen a video or two from the MetalJesusRocks channel – with over 750,000 subscribers, it's one of the most popular on YouTube, inside or outside of our hobby. The man behind it is Jason Lindsey, a veteran collector with thousands of games in an impressive room that serves as the backdrop to his many videos.

Jason started gaming on the Atari 2600, but it was moving from the console to computers that proved pivotal. "It was the Commodore 64 that really sparked my interest in collecting and playing all those wonderful games. And then later while working at Sierra On-Line in the Nineties I got access to their entire game library, which was amazing at the time."

Jason has been collecting for 35 years now, though it hasn't always been his focus during that time. "At one point I sold off all my big box PC games during college because I got tired of hauling them around from rental house to rental house. They take up a lot of room! Thankfully, I have reacquired all of them and much more."

Although his collection also covers a diverse range of console platforms, the computer scene is still Jason's specialism today. "I really enjoy collecting big box PC games from the Eighties and Nineties, and I have several thousand of them complete in box. They are getting a bit hard to find these days, but every time I go to a retro gaming expo I always do a quick lap of the vendors to see if I can spot anything I don't currently have. Old Atari 8-bit, C64, Amiga, Atari ST, MS-DOS, Windows 95… I'll take it all!"

Showcasing that collection in video was a natural move for Jason, as it represented an intersection between his career and his hobbies. "Before YouTube I had a background in audio production engineering, and I worked in a local recording studio recording live music, but also editing some local Seattle commercials. I also loved shooting home movies as a kid," he explains. The channel really took off following a tongue-in-cheek look at one of his favourite computers. "When the iPad 2 was released in 2011,

I did a video called 'iPad vs Commodore 64 – Which Should You Get?' It was a fun review where I tried to help potential consumers decide which system they should get, and it went viral (for the time), getting over 60,000 views."

Jason's collecting experience also incorporates one of our own worst fears – as viewers of his channel will know, water damage and mould were found in his game room in 2018. "The actual damage from that basement leak could have been so much worse because it was such a slow leak. All I really lost was furniture, however the fix was very time-consuming and costly. That's one of the risks of having my collection underground and living in the Seattle area," he explains. "One of the nice things about my new home is that my collection is *not* underground, so it should be okay now."

So is there anything he's still after? "I'd like a copy of *Softporn Adventure* by Sierra on PC," he concludes. "It was one of the first releases by Sierra, and features a naughty photo of owner/developer Roberta Williams in a hot tub on the cover. It's incredibly difficult to find in great condition at a reasonable price." ✱

POWER MAC G4 CUBE

"One of the most beautiful computers ever made, in the box."

PAID: $300

JEWEL IN THE CROWN

NORTH AMERICAN 6400 PROTOTYPE

PAID: PRICELESS

BARGAIN HUNT

Your guide to the rising world of retro prices

MAGAZINE MAGIC

COMPUTER & VIDEO GAMES

If you're interested in a nostalgic flip through the pages of the magazine that guided many gamers through the Eighties, there are plenty of opportunities to grab old issues. Condition plays a role in the pricing, as you'd expect, but single issues from the Eighties tend to sell for **£5-£10**, though if you buy in bulk you can get it as low as **£2.50** an issue. Nineties issues seem to be cheaper, with most selling within the **£2-£5** range.

PLOK

Prices for this SNES cult favourite seem to be all over the place. Although condition can explain some difference, complete copies of the PAL version are going for as little as **£7.50** and as high as **£40**. Loose carts run from **£3.50-£8**. A complete copy of the US version is **$50-$65**, while loose carts typically go for **$15-$20**.

SPIDER-MAN

If you're looking for a little web-slinging action on your Atari 2600, you can enjoy it at quite a reasonable price. You should easily find a loose cart for **£5** or less, and even as little as **£1**. Complete boxed copies typically sell for around **£25**, but can go as low as **£14**. US prices are similar, with sealed copies going for **$300** or more.

DESTRUCTION DERBY 2

We prefer the automotive assault of the second instalment in this series, and it's a game that offers cheap thrills. US copies can regularly be had in the **$5-$10** range, and PAL copies can be had for **£5-£15**, with Platinum copies occupying the low end of the range. A PAL double pack with *WipEout 3 Special Edition* ranges from **£20-£35**.

HOW MUCH?!

SEGA RALLY CHAMPIONSHIP

Sega pledged plenty of known arcade names for the N-Gage, including *Alien Front* and *Virtua Cop*. These were broadly cancelled, but *Sega Rally* managed to sneak out in Australia and the Asian market. A sealed copy of the game with a small tear in the wrap recently sold for **£210** – a fair reflection of the game's rarity, but not a particularly good indicator of its quality, as it's sadly nowhere near as enjoyable as its arcade namesake.
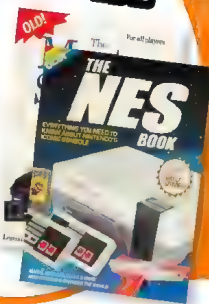
★ STAR LETTER

YOSHI'S MUSICAL WORLD

Hi **Retro Gamer**,

I am a reader of yours, gaming is my hobby. Outside of gaming, I'm a professional musician that specialises in chamber music and performs at venues like Lincoln Center and Carnegie Hall. Because of COVID-19, as of now all of my concerts have been cancelled from March to August and it is devastating to our community. I decided to work my hardest to stay positive and invest my time and energy into things that I would enjoy and could possibly bring people some joy, which is making funny game arrangement videos. I would love to find some platforms to share my voice of bringing some joy out there, which would make me feel like, as a musician, I'm doing my job as well while I can't be performing concerts.

I just made one that would fit your category which is *Yoshi's Island Athletic Theme*, which is my very favourite retro game music. It was tremendous fun to make, even though it was very hard and so much work. I've put the link below, if you think it's good, and think it would be fitting for you to put it out, I'd really appreciate it!

Go to youtu.be/UNITMSeCd9s.
Ten-Hsi, Cindy W.

Thanks for sending this our way, it was a most impressive performance! We particularly liked the fact that you left us to discover the unorthodox use of a bag of cereal as an instrument, which was an unexpected choice from a professional musician – though of course, these are unusual times.

Readers, give this a watch, and if you enjoy Cindy's performance in this video be sure to take a look at the others on her channel. Nintendo fans will be thrilled to see plenty of *Zelda* music, including an excellent rendition of the original NES game's theme music.

» When we read the words 'professional musician' and 'Carnegie Hall', we weren't expecting reggae

WONDER WOMEN

Hello,

About three months ago I remember viewing the **Retro Gamer** website and remember coming across a Famicom game that was talked about. It had a female protagonist (like *Metroid*, but it wasn't *Metroid*) and was released in 1986 or 1987.

Do you have any idea off-hand what game this was?
David Tylers

» [NES] The Guardian Legend is a classic case of packaging trying to hide the game's starring woman

We think the closest game profile on our site is *The Guardian Legend* (or *Guardic Gaiden* in Japan), a 1988 game developed by Compile. Like *Metroid*, it features a woman blasting her way through a horde of hostile aliens before they can reach Earth, but it uses a top-down perspective rather than standard side-on 2D platforming and features shoot-'em-up sections. There aren't too many games on the system that feature female protagonists, so we're reasonably confident of our answer here. Let us know if that's the one you were thinking of.

SPEED RACER

Hi **Retro Gamer**,

I've heard about your magazine from several sources and have actually been on your website a lot. I wanted to let you know that I just broke the last two world records on the arcade version of *Pole Position II*. They were over 33 years old, to go with my other two world records from last year to become the first person to hold the records of all four racetracks at the same time. Fuji, Test Track, Suzuka, and Seaside. I played it on an original PCB in a *Pole Position* cockpit arcade machine with all original controls, power, etc.

You can watch them through the Twin Galaxies page, just click on my score: bit.ly/PolePosition2WR. Keep up the great work on your magazine!
Dan Yamnitz

» Dan's new world records show that there's still scope to do amazing things in old games

Congratulations on your achievement, Dan! That's a great custom shirt, too. It's a timely reminder that there are plenty of classic arcade world records out there for the taking, if you've got the skill and dedication – and if you do find yourself with more time than usual these days, that can be a fun way to spend it. Better yet, sending your achievement to us lets other players know there's competition to be had. Not every game score can be as hotly contested as *Donkey Kong*, but competitive gaming is always more fun with a healthy field of competitors – after all, what's the fun in being a king if nobody ever challenges you for the crown?

BREW-PITER

Hello!

Hope you're all self-isolating successfully! I made a Spectrum game called *Jumpin' Jupiter*. It's like *Manic Miner* but in space and split

CONTACT US

over two games to make 50 levels in total. You can download the games at quantumsheep.itch.io. It's been downloaded over a thousand times so far, which is lovely, and a 128K version is hopefully on its way. Have fun, stay safe!
Quantum Sheep

Thanks for sending this our way! Hopefully, this will bring some smiles to Speccy fans right now – it's a free download, so check it out on your favourite emulator or even real hardware, if you have the means.

Of course, regular readers will know that we'd normally feature this in our Homebrew section rather than the Mailbag. Unfortunately, our regular

» [ZX Spectrum] If you fancy making a game like Jumpin'
Jack too, check out Jonathan Cauldwell's Platform Game
Designer too

Homebrew author Jason Kelk has been in ICU with COVID-19, so we've put our Homebrew section on hold for the time being. If you'd like to show your support you can visit his GoFundMe page at https://bit.ly/jkgofundme.

FEVER AND DELIRIUM
Dear **Retro Gamer**,
I was pleasantly surprised at the issue on Pac-Man when I saw the short piece on Pac-Man Fever. When Pac-Man Fever was released I owned a game room in Sterling Colorado named appropriately 'The Arcade'. I was doing some heavy advertising on the local radio and my salesman came up with the idea to use the opening to Pac-Man Fever for an ad campaign. This worked out great for us as other radio stations that you could listen to in the area were playing Pac-Man Fever about once every two or three hours and my competitor had one of those stations playing in his game room. It drove him crazy that this record would make people think of my place.

Thank you, Buckner and Garcia, for a hit that became almost like free advertising, and thank you **Retro Gamer** for bringing up a whole

DISCUSSED THIS MONTH

Video call fashion
As our 'new normal' of working from home continues, video calls between the team members have seen some interesting fashion choices. Drew showing up on camera with a cap on and hoodie up was a surprise, but not as much of a surprise as Darran's drastic haircut – our benevolent leader has had his head shaved, with some friends [Trolls, surely? – Ed] comparing him to a bearded Dizzy. Nick's just happy that the white hairs in his increasingly bushy beard don't show up on webcam, and we frequently don't even see Andy, instead getting photos of the cat that has taken to occupying his home office chair.

plethora of happy memories! Just keep doing what you do so well.
Steve Boyle

Kudos to you and your salesman for beating the competition to the punch there, Steve! It sounds like you guys had the measure of the moment and it just goes to show how Pac-Man, as well as everything to do with the hungry little guy, was such a massive phenomenon in the early Eighties. Hopefully you went and gave it another listen for old times' sake – maybe as you read this month's feature on that amazing decade.

Your say

Every month, Retro Gamer asks a question on social media and prints the best replies. This month we wanted to know…
You can keep one Eighties computer, one Eighties console and one Eighties arcade game. What are your picks?

RetroBob
Master System for its large and varied game library, Archimedes A3000 for the brilliant OS and community/userbase, and Robotron for the arcade because it's hard and fun.

CommodoreBlog
PC Engine, fantastic games library plus many awesome arcade ports. Amiga 500 as it's the best computer ever created. Hyper Sports, an arcade machine with lots of replay value and one I've always wanted to own.

Paul Monaghan
Atari ST, NES and Final Fight as the arcade cab. ST was my first machine in 1989, NES best 8-bit console with amazing library

and Final Fight is my fave arcade game.

Crusty Starfish
Commodore 64 – the best-selling computer in history can't be wrong. PC Engine – if only they had released it here! I'd play this any day over the Nintendo and Sega things from the Eighties. Gauntlet – four-player cab. Four mates around and a bag of 10p pieces. Yes please!

Gamepopper
Sega Mega Drive, Commodore 64 and Gyruss. One because it came out in the Eighties but had the best games of the early Nineties, one because its games had amazing music, and one because it's one

of the best shooters that hasn't had a re-release in two decades.

Leonardo Pereira
I would go with a Mega Drive for its fantastic library that I already know and also the Japanese exclusives that I still got to play, a MSX2 for some Konami love and music, and a beautiful Double Dragon arcade to play until the end of times.

ncf1
Console: Sega Master System Best overall arcade-at-home experience, wide variety and decent-to-really-good ports most of the time. Computer: Amiga. Just sheer variety of both original games and arcade ports, that amazing sound chip, and let's

not skirt around it, 'free' games. Arcade: Donkey Kong. It just keeps giving that game!

Ste Foster
NES, Amiga and 1942. So many good NES platforming games, I mean Mega Man and Mario 3, come on. The Amiga is a great all-rounder for making music and graphics as well as gaming. 1942 is such a satisfying shooter, and I never get bored of it.

Robert David Swan
ColecoVision for its excellent arcade ports, Gauntlet II for brilliant multiplayer mayhem, and the Amiga 500 to revisit all of the development and journalism work I poured so much of my life into over the years.

nextmonth
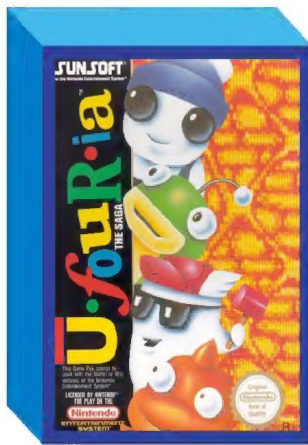
CREATING A MONSTROUS LEGACY

MALCOLM EVANS RECALLS THE EVOLUTION OF **3D MONSTER MAZE**

AND MUCH MORE, INCLUDING...

Lord Alan Sugar, BBC Micro, Monster Hunter, The History Of The Settlers, Nintendo iQue Player, Black Tiger, Chris Cannon, Tekken 3, Chip's Challenge, Felony 11-79, TurboGrafx TurboPad, Mr Heli

ENDGAME

UFOURIA: THE SAGA

» Localisation is a tricky art these days, but in the far less globalised era of the NES, it was considerably easier. Just take a Japanese game, change all the names and redraw the sprites, and nobody is any the wiser. But now, we've got the time and knowledge to moan about innocuous changes, and since we're bored of doing it on Twitter, let's skip to the end and do it here...

01

> NOW THAT WE HAVE MADE THIS WORLD A PEACEFUL PLACE, WHY DON'T WE

» After doing plenty of work un-crapping the crappy situation, Freeon-Leon fancies sticking around. That makes sense, there's a certain sense of local investment that comes from defeating an alien-controlled robot baddie.

02

> YOU CAN STAY IF YOU WANT BUT I MUST RETURN TO UFOURIA.
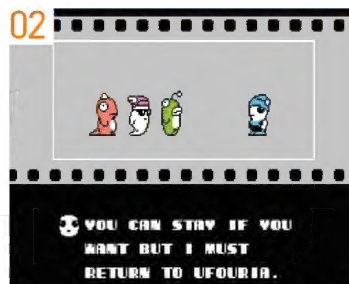
» Unfortunately, Bop Louie is cursed to move on from any situation he manages to improve in any substantial way. In this sense he's like a good supply teacher, or Scott 'Count' Bakula (not actually a real vampire) in *Quantum Leap*.

03

> GOOD-BYE BOP LOUIE! THANK YOU FOR EVERYTHING!

» Our friends bid farewell to Bop Louie, which we're fine with. We'd rather have Hebereke around anyway, because we recognise him from the fine SNES puzzle game *Hebereke's Popoon*. This guy's a second rate impostor, to be honest.

04

> I DECIDED TO COME BACK BECAUSE WE HAD SO MUCH FUN TOGETHER.

» But no, we can't have nice things so Bop Louie comes back immediately, rather like a band worried that the shouts of 'encore' might peter out a bit too quickly. Honestly, this is the biggest disappointment since *Hebereke's Popoitto* turned out to be not as good as *Hebereke's Popoon*.

05

> DON'T JUST STAND THERE. LET'S GO!

» But now, having decided not to go away of his own accord, Bop Louie suddenly insists that everybody else gets going instead. Honestly, Bop Louie, the world doesn't revolve around you. Hebereke would never do this to O-Chan, Jennifer and Sukezaemon. Get over yourself, man.